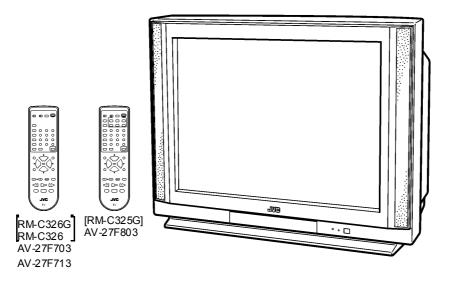
JVC

SERVICE MANUAL

COLOR TELEVISION

AV-27F703/s AV-27F713/s AV-27F803/s BASIC CHASSIS

GJ (No.A111)





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SPECIFICATIONS

	Items	Contents			
Dimensions (W×	H× D)	29-7/8"×23"-3/8"×19-3/4" (758mm×593mm×500mm)			
Mass		94.6 lbs (43.0 kg)			
TV System	TV RF Systen				
and Color Syster	n Color System	NTSC			
	Sound System	BTSCSystem (Multi-Channel Sound)			
TV Receiving Ch	annels VL Ban	1 (02~06) 54MHz ~88MHz			
and Frequency	VH Band				
	UHF Ban	d (14~69) 470MHz~806MHz			
CATV Receiving	Channels Low Band	1 (02~06, A-8) by (02~06&01)			
and Frequency	High Band				
	Mid Ban	d (A~1) by (14~22)			
	Super Ban	d (J~W) by (23~36) — (54MHz~804MHz)			
	Hyper Ban				
	Ultra Band	, , , , , , , , , , , , , , , , , , , ,			
	Sub Mid Band	(A8, A4~A1) by (01, 96~99)			
	TV/CATV Total Channe	l 180 Channels			
Intermediate Fred	quency Video IF Carrie	r 45.75MHz			
	Sound IF Carrie	r 41.25 MHz (4.5 MHz)			
Color Sub Carrie	r	3.58MHz			
Power Input		120V AC, 60Hz			
Power Consump	tion	140W			
Picture Tube		27" (68cm) Measured Diagonally			
High Voltage		30.0kV±1.3kV (at zero beam current)			
Speaker		2" × 4-3/4" (5 × 12 cm) Oval type × 2			
Au dio Power Out	t	5W + 5W			
	Input 1 (Rear) S-Vide	••• • • • • • • • • • • • • • • • • • •			
	imput i (Neai) 3-vide	C: 0.286V(P-P) (Burst signal, when terminated with 75 Ω)			
	Vide				
	Au dio (L/MONO, R	* ' '			
	Input 2 (Rear) Vide	••• •••			
	Component vide				
	: Component rides	P_B , P_B : 0.7V(p-p), 75 Ω			
Input terminals	Au dio (L/MONO, R	500mV(rms) (-4dBs), High Impedance			
	Input 3 (Front) Vide	o 1V(p-p), 75 Ω			
	Au dio (L/MONO, R				
	Input 4 (Rear) (For AV-27F8 03)				
Component video		Y : 1V(p-p) Positive (Negative sync provided, when terminated with 75Ω)			
	1	P_B , P_R : 0.7V(p-p), 75 Ω			
	Au dio (L/MONO, R	500mV(rms) (-4dBs), High Impedance			
Fix Audio Output		500mV(rms), (-4dBs), LOW Impedance (400Hz when modulated 100%)			
AV compulink III	Input	3.5mm mini jack			
An ten na termina		75 Ω (VHF/UHF) Terminal, F-Type Connector			
Remote Control I	JIIIL	RM-C326G(AV-27F703) / RM-C326(AV-27F713) /RM-C325G(AV-27F803) (AA/R6/UM-3 battery × 2)			
		(APVINO/OTVES DALICELY ^ Z)			

Design & specifications are subject to change without notice.

SAFETY PRECAUTIONS

- The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
- Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
- 3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. Electrical components having such features are identified by shading on the schematics and by (Δ) on the parts list in Service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.

4. Use isolation transformer when hot chassis.

The chassis and any sub-chassis contained in some products are connected to one side of the AC power line. An isolation transformer of adequate capacity should be inserted between the product and the AC power supply point while performing any service on some products when the HOT chassis is exposed.

Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.

Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (\bot) side GND, the ISOLATED(NEUTRAL) : (\bot) side GND and EARTH : (\oplus) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.

- If above note will not be kept, a fuse or any parts will be broken.

 6. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).
- 7. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.
- 8. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.
- 9. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

10. Isolation Check

(Safety for Electrical Shock Hazard)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock

(1) Dielectric Strength Test

The is olation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 1100V AC (r.m.s.) for a period of one second.

(.... Withstand a voltage of 1100 V AC (r.m.s.) to an appliance rated up to 120 V, and 3000 V AC (r.m.s.) to an appliance rated 200 V or more, for a period of one second.)

This method of test requires a test equipment not generally found in the service trade.

(2) Leakage Current Check

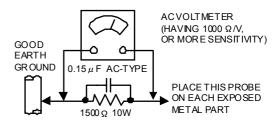
Plug the AC line cord directly into the AC outlet (do not use a line is olation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).

However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

Alternate Check Method

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a $1500\,\Omega$ 10W resistor paralleled by a $0.15\,\mu$ F AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.).

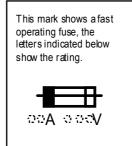
However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).

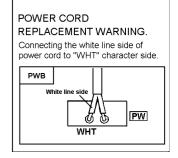


11. High voltage hold down circuit check.

After repair of the high voltage hold down circuit, this circuit shall be checked to operate correctly.

See item "How to check the high voltage hold down circuit"





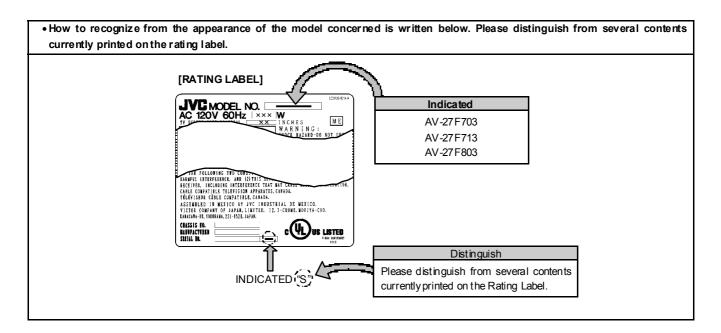
FEATURES

- New chassis design enables use of a single board with simplified circuitry.
- Users can make fun to connect the DVD player with the component video signal input terminal.
- Provided with miniature tuner (TV/CATV).
- Multifunctional remote control permits picture adjustment.
- Adoption of the CHANNEL GUARD function prevents the specific channels from being selected, unless the "ID number" is key in.
- I²C bus control utilizes single chip ICs.
- Adoption of the VIDEO STATUS / THEATER PRO. function.
- Adoption of the ON/OFF TIMER and SLEEP TIMER function.

- Built-in V-CHIP system.
- Clos ed-caption b roadcasts can be viewed.
- Built-in MTS system, BBE / HYPER-SURROUND system.
- S-VIDEO in put terminal for taking best advantage of Super VHS.
- Digital Comb filter Improved picture quality.
- Built-in EZ SURF system.(AV-27F803)

 By pushing the EZ SURF key, Back Program Information can be displayed in written from program Information uses a CALL LETTER (broadcasting station ID), a Network name and a Program name of XDS data, and collect's tuning of the tuner for PIP one by one.

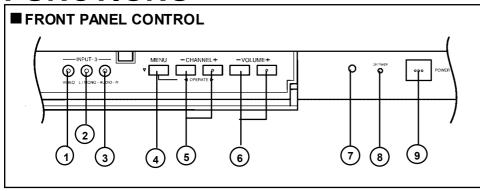
HOW TO IDENTIFY MODELS

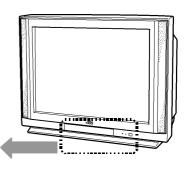


MAIN DIFFERENCE LIST

Δ	Model name	AV-27F 703/s	AV-27F 713/s	AV-27F 803/s
	Parts Name	7.0 2.11 100.0	7.0 211 110/0	7.0 277 000.0
	MAIN PWB	SGJ-1004A-M2	SGJ-1003A-M2	SGJ-1002A-M2
	PIP PWB	×	×	SGJ-4001A-M2
	AV SEL PWB	SGJ-5002A-M2	←	SGJ-5001A-M2
	3D Y/C SEP MODULE PWB	×	×	SGJ 0Y00 1A-M2
Δ	FRONT CABI. ASSY	LC10878-003B-A	LC10878-004A-A	LC10878-003B-A
	JVC MARK	CM4 8006-0 08-C	CM48006-009-C	CM48006-008-C
Δ	DOOR	LC20628-001C-A	LC20628-002A-A	LC20628-001C-A
Δ	KNOB (POWER)	LC31237-001A-A	LC31237-002A-A	LC31237-001A-A
	OPERATION SHEET	LC31238-004A-A	LC31238-005A-A	LC31238-004A-A
Δ	CONTROL KNOB	LC20217-004B-A	LC20217-006A-A	LC20217-004B-A
\triangle	TERMINAL BOARD	LC20899-004A-A	LC20899-004A-A	LC20899-005A-A
	REMOCON UNIT	RM-C326G-1A	RM-C326-1A	RM-C325G-1A
	INPUT TERMINAL	INPUT1~INPUT3	←	INPUT1~INPUT4

FUNCTIONS

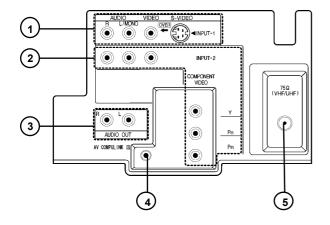




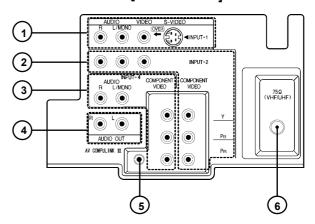
① INPUT3 VIDEO terminal	6 VOLUME -/+ buttons
② INPUT3 AUDIO L / MONO terminal	② SENSOR REMOTE CONTROL
③ INPUT3 AUDIO R terminal	® ON TIMER LED
④ MENU button (▼)	9 POWER button
⑤ CHANNEL -/+ buttons OPERATE ◀/▶ buttons (use MENU screen)	

REAR TERMINAL

[AV-27F703/s, AV-27F713/s]



[AV-27F803/s]



[AV-27 F7 03/S, AV-2 7F 713/S]

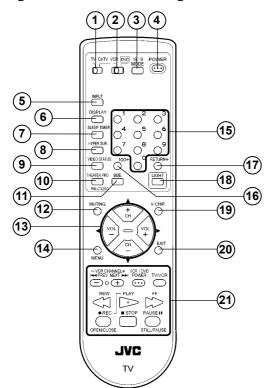
- 1 INPUT 1 (S-VIDEO, V, L/MONO, R) terminals
- ② INPUT 2 (V, L / MONO, R) terminals / COMPONENT VIDEO(Y, PB, PR) terminals
- 3 AUDIO OUT(L, R) terminals
- ④ AV COMPULINK Ⅲ
- (5) VHF / UHF terminal

[AV-27 F8 03/s]

- ① INPUT 1 (S-VIDEO, V, L/MONO, R) terminals
- (2) INPUT 2 (V, L / MONO, R) terminals / COMPONENT VIDEO(Y, PB, PR) terminals
- (3) INPUT 4 (L, R) terminals
 / COMPONENT VIDEO(Y, PB, PR) terminals
- 4 AUDIO OUT(L, R) terminals
- ⑤ AV COMPULINK Ⅲ
- 6 VHF / UHF terminal

■ REMOTE CONTROL UNIT

RM-C326G: AV-27F703/s RM-C326: AV-27F713/s



1 TV / CATV switch

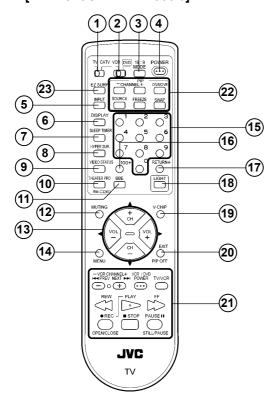
- 2 VCR / DVD switch
- 3 16:9 MODE Key
- 4 POWER Key
- ⑤ INPUT Key (→ TV → VIDEO1 → VIDEO2 → VIDEO3 ¬
- 6 DISPLAY Key
- ⑦ SLEEP TIMER Key (→ 0 → 15 → 30 ······165 → 180 ¬
- 8 HYPER SUR. Key (Can be changed ON / OFF)
- 9 VIDEO STATUS Key
- 10 THEATER PRO key
- 11 BBE key (Can be changed ON / OFF)
- 12 MUTING Key

13 FUNCTION Key (CH -/+ / VOL -/+)

The FUNCTION keys operate CHANNEL and VOLUME normally. These keys are also used to navigate MENU system.

- **14** MENU Key
- **15 NUMBERS Key**
- 16 100+ Key
- 17 RETURN+ Key
- 18 LIGHT Key
- 19 V-CHIP Key
- 20 EXIT Key
- 21 VCR / DVD Keys

[RM-C325G: AV-27F803/s]



- 1 TV / CATV switch
- ② VCR / DVD switch
- ③ 16:9 MODE Key
- 4 POWER Key
- 5 INPUT Key(→ TV → VIDEO1 → VIDEO2 → VIDEO3 → VIDEO4 ¬
- 6 DISPLAY key
- 8 HYPER SUR. Key (Can be changed ON / OFF)
- 9 VIDEO STATUS Key
- 10 THEATER PRO key
- 11) BBE key(Can be changed ON / OFF)
- 12 MUTING Key

③ FUNCTION Key (CH -/+ / VOL -/+)

The FUNCTION keys operate CHANNEL and VOLUME normally. These keys are also used to navigate MENU system.

- 14 MENU Key
- 15 NUMBERS Key
- 16 100+ Key
- 7 RETURN+ Key
- 18 LIGHT Key
- 19 V-CHIP Key
- 20 EXIT / PIP OFF Key
- 21 VCR / DVD Keys
- 22 PIP Key
- 23 EZ SURF Key (Back Program Information can be displayed.)

SPECIFIC SERVICE INSTRUCTIONS

DISASSEMBLY PROCEDURE

REMOVING THE REAR COVER

- 1. Disconnect the power plug from wall outlet.
- 2. As shown in the Fig.1, remove the 12 screws marked (A).
- 3. Withdrawthe rear cover backward.

REMOVING THE TERMINAL BOARD

- After removing the rear cover.
- 1. As shown in Fig.1, remove the screws marked (B).
- $2. With drawthe\ terminal\ board\ toward\ you.$

REMOVING THE CHASSIS

- After removing the rear cover / terminal board.
- Slightly raise the both sides of chassis by hand and remove the
 claws under the both side of the chassis from the front cabinet.
- 2. Withdrawthe chass is backward.

 (If necessary, remove the wire clamp, connectors etc.)

REMOVING THE SPEAKER

- After removing the rear cover.
- 1.As shown in Fig. 1, removing the **4** screws marked **©**, then remove the speaker.
- $2. \\ Follow the same steps when removing the other hand speaker.$
- NOTE: When removing the 4 screws marked © of the speaker, remove the lower side screw first, and then remove the upper one.

REMOVING THE LED & POWER SW PWB

- After removing the rear cover & terminal board.
- 1. Remove the **2** screws marked **(D)** as shown in Fig. 1.
- 2. Withdraw the LED $\&\,\text{POWER}$ SW PWB toward you.
- * If necessary, remove the wire clamp, connector etc.

REMOVING THE FRONT CONTROL PWB

- After removing the rear cover & terminal board.
- 1. Remove the **2** screws marked **E** as shown in Fig. 1.
- 2. Withdraw the FRONT CONTROL PWB toward you.
- * If necessary, remove the wire clamp, connector etc.

CHECKING THE CHASSIS

To check the PW Board from back side.

- 1. Pull out the chassis (refer to REMOVING THE CHASSIS).
- Erect the chassis vertically so that you can easily check the back side of the PW Board.

[CAUTION]

- When erecting the chassis, be careful so that there will be no contacting with other PW Board.
- Before turning on power, make sure that the wire connector is properly connected.
- When conducting a check with power supplied, be sure to confirm that the CRT EARTH WIRE (BRAIDED ASS'Y) is connected to the CRT SOCKET PW board.

WIRE CLAMPING AND CABLE TYING

- 1. Be sure to clamp the wire.
- Never remove the cable tie used for tying the wires together.Should it be inadvertently removed, be sure to tie the wires with a new cable tie.

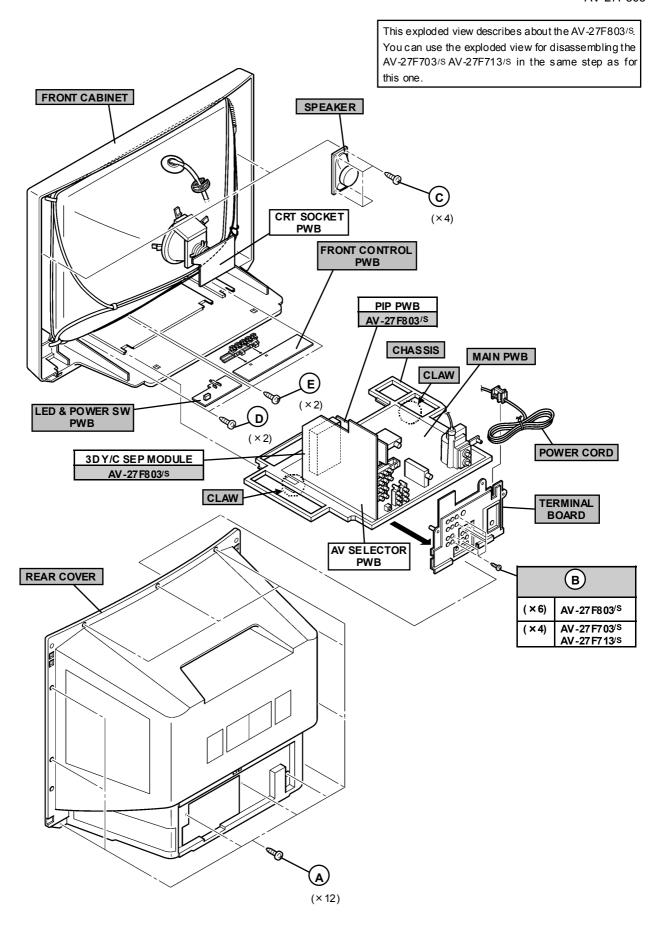


Fig.1

MEMORY IC REPLACEMENT

1. Memory IC

This TV uses memory IC.

This memory IC stores data for proper operation of the video and deflection circuits.

When replacing the memory IC, be sure to use an IC containing this (initial value) data.

2. Memory IC replacement procedure

(1) Power off

Switch off the power and disconnect the power cord from the wall outlet.

(2) Replace the memory IC

Be sure to use a memory IC written with the initial setting data.

(3) Power on

Connect the power cord to the wall outlet and switch on the power.

(4) Confirm the system constant value

- 12.SYSTEM (SYS) do not adjust normally.
- The adjustment should not be done without signal.

■ How to enter the SERVICE MENU.

- 1) Press the **SLEEP TIMER** key and set **SLEEP TIMER** for \[\bar{0} \text{ min} \] .
- Before disappear the display of SLEEP TIMER settings, simultaneously press the DISPLAY key and VIDEO STATUS key of the remote control unit.
- 3) The SERVICE MENU screen will be displayed as shown Fig. 1.

■ How to enter the 12. SYSTEM(SYS).

- While the SERVICE MENU is displayed, select the 12.SYSTEM(SYS) item with FUNCTION (▼/▲) keys, and the FUNCTION (◄/►) keys is pressed, the screen will be displayed as shown in Fig.2.
- 5) Refer to the SYSTEM (SYSTEM CONSTANT) TABLE 1 and check the setting items. If the value is different, select the setting item with the FUNCTION (▼/▲) keys and adjust the setting with the FUNCTION(◀/▶) keys. (The letters of the selected item are displayed in yellow.)
- When adjustment has completed, the values store into memory IC automatically
- 7) Press the EXIT key to return the SERVICE MENU screen.
- 8) Then press the EXIT key again to return the normal screen.

(5) Receive the channel setting

Refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the receive channels (Channels Preset) as described.

(6) User settings

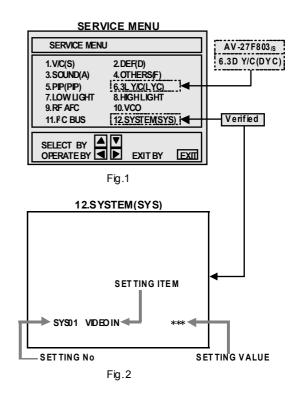
Check the user setting items according to TABLE 2.

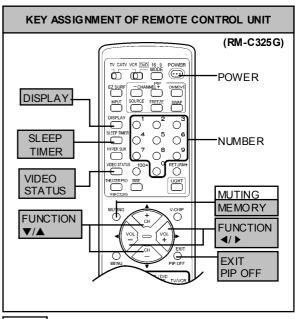
Where these do not agree, refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the items as described.

(7) SERVICE MENU setting

Verify what to set in the SERVICE MENU, and set whatever is necessary(Fig.1).

Refer to the SERVICE ADJUSTMENT for setting.





NOTE Although design is different, each remote controller has the same control function.

12.SYSTEM(SYS) [System Constant setting]

		Initial setting value				Initial set	ting value
No.	Setting item	AV 07 F0 00/S	AV -27 F7 03/S	No.	Setting item	AV 07 F0 00/S	AV-27F703/S
		AV -27 F8 03 ^{/S}	AV -27 F7 13/S			AV-27F803 ^{/S}	AV-27F713/S
SYS01	VIDEO IN	04	03	SYS13	HYP SURR	01	01
SYS02	PIP	01	00	SYS14	16:9 MD	01	01
SYS03	3D Y/C	01	00	SYS15	HYP SCAN	01	01
SYS04	YCV	01	01	SYS16	EZ SURF	01	00
SYS05	CCD PCHK	01	01	SYS17	ID DISP	01	01
SYS06	PURITY	00	00	SYS18	COMPULINK	01	01
SYS07	VM	01	01	SYS19	CCD	01	01
SYS08	NOISE CR	01	00	SYS20	VCHIP	01	01
SYS09	CLR TEMP	01	01	SYS21	VCHIP CA	01	01
SYS10	THEATER	01	01	SYS22	JVC LOGO	01	01
SYS11	THEATER PRO	01	01	SYS23	CMP IN	01	01
SYS12	BBE	01	01	SYS24	CXA1875	00	00

Table 1

User setting

Setting Setting	Setting value	Setting item	Setting value		
	Use remote of	controller keys			
POWER	OFF	DISPLAY	OFF		
CHANNEL	Cable-02	VIDEO STATUS	DYNAMIC		
VOLUME	10	HYPERSURROUND	OFF		
TV/VIDEO	TV	BBE	ON		
		PIP SOURCE	Cable-04 (AV-27 F8 03 _{/S})		
	Settings	of MENU			
PIC	TURE MENU	INIT	FIAL SETUP MENU		
STANDARD		LANGUAGE	ENG		
TINT	CENTER	FRONT PANEL LOCK	OFF		
COLOR	CENTER	V2 COMPONENT-IN	NO		
PICTURE	CENTER+14	AUTO SHUT OFF	OFF		
BRIGHT	CENTER	CLOSED CAPTION	OFF (CC1 / T1)		
DETAILi	CENTER / +14 (AV-27 F8 03/s) +10 (AV-27 F7 03/s / AV-27 F7 13/s)	AUTO TUNER SET UP	Unnecessary to set		
COLORTEMPERATURE	LOW	CHANNELSUMMARY	Setting Channel Guard channel: All OFF		
NOISE MUTING	ON	V-CHIP	OFF		
SOUNI	O ADJUST MENU	SET LOCK CODE	(0000) Unneces sary to set		
BASS	CENTER	XDSID	ON		
TREBLE	CENTER				
BALANCE	CENTER				
MTS	STEREO				
CLOCK	/ TIMERS MENU				
SET CLOCK	MANUAL				
	TIME ZONE : PACIFIC				
	D.S.T. : OFF				
ON / OFF TIMER	OFF				

Table 2

SERVICE ADJUSTMENTS

ADJUSTMENT PREPARATION

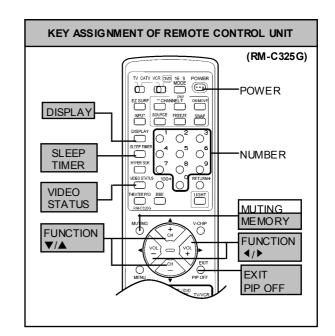
- You can make the necessary adjustments for this unit with either the Remote Control Unit or with the adjustment tools and parts as given below.
- Adjustment with the Remote Control Unit is made on the basis of the initial setting values, however, the new setting values which set the screen to its optimum condition may differ from the initial settings.
- 3. Make sure that AC power is turned on correctly.
- 4. Turn on the power for set and test equipment before use, and start the adjustment procedures after waiting at least 30 minutes.
- Unless otherwise specified, prepare the most suitable reception or input signal for adjustment.
- 6. **Never touch any adjustment part** which are not specified in the list for this adjustment variable resistors, transformers, initial setting value, etc.
- 7. Presetting before adjustment.
 Unless otherwise specified in the adjustment instructions, preset the following functions with the remote control unit:

User menu preset value

MENU ITEM	PRESET
VIDEO STATUS	STANDARD
BASS, TREBLE, BALANCE	CENTER
HYPER SURROUND	OFF
TINT, COLOR, PICTURE, BRIGHT, DETAIL	CENTER
MTS	STEREO

ADJUSTMENT EQUIPMENT

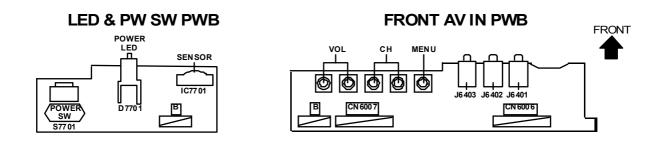
- 1. DC voltmeter (or digital voltmeter)
- 2. Oscilloscope
- 3. Signal generator (Pattern generator) [NTSC]
- 4. Remote control unit
- 5. TV audio multiplex signal generator.
- 6. Frequency counter



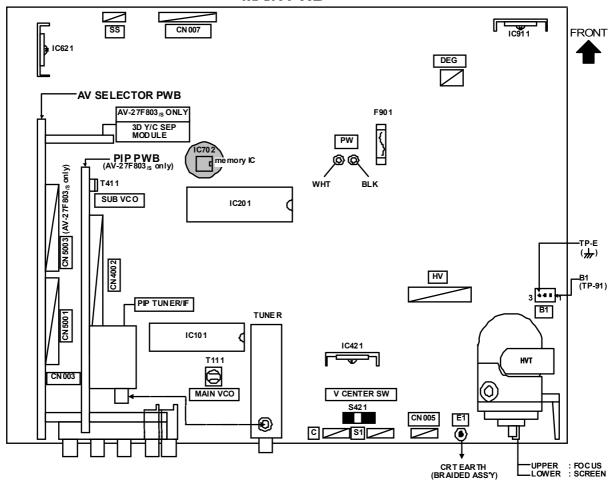
ADJUSTMENT ITEMS

• CHECK OF B1 POWER SUPPLY	ADJUSTMENT OF VIDEO / CHROMA CIRCUIT
ADJUSTMENT OF VCO	WHITE BALANCE(High Light & LowLight) adjustment
MAIN VCO adjustment	PIP WHITE BALANCE(High Light) adjustment
SUB VCO adjustment	SUB BRI GHT adjust ment
RF. AGC adjustment	SUB CONTRAST adjustment
FOCUS adjustment	SUB COLOR adjustment
ADJUSTMENT DEF CIRCUIT	SUB TINT adjustment
V. HEIGHT / V. CENTER(4:3) adjustment	ADJUSTMENT OF MTS CIRCUIT
V. HEIGHT / L. LIN(16:9) adjustment	MTS INPUT LEVEL adjustment
H. POSI, H. SIZE & SIDE PIN [(4:3) &(16:9)] adjustment	MTS SEPARATION adjustment
PIP DISPLAY POSI adjustment	● HOW TO CHECK THE HIGH VOLTAGE HOLD DOWN CIRCUIT

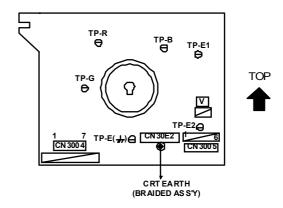
ADJUSTMENT LOCATIONS

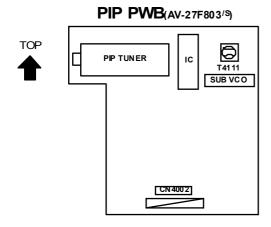


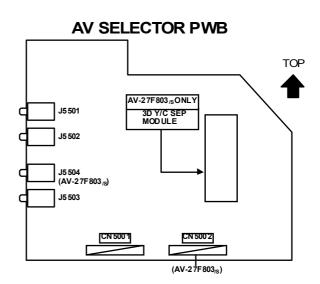
MAIN PWB



CRT SOCKET PWB







BASIC OPERATION OF SERVICE MENU

1. TOOL OF SERVICE MENU OPERATION

Operate the SERVICE MENU with the REMOTE CONTROL UNIT.

2. In general, basic setting (adjustments) items or verifications are performed in the SERVICE MENU.

(1) V/C (S) · · · · · · · · · · · · · · · · · · ·	This set the setting values (adjustment values) of the VIDEO/CHROMA circuits.
(2) DEF (D)	This set the setting values (adjustment values) of the DEFLECTION circuit.
(3) SOUND (A) · · · · · · · · · · · · · · · · · · ·	This set the setting values (adjustment values) of the AUDIO circuit.
(4) OTHERS (F)	This is used when the OTHERS MODE is verified. [Do not adjust]
(5) PIP (PIP) · · · · · · · · · · · · · · · · · · ·	• This set the setting values(adjustment values) of the PICTURE-IN-PICTURE circuit.
	(PIP is means as Picture In Picture) [AV-27F803/S]
(6) 3LY/C(LYC)/ 3DY/C(DYC) · · · · · · · · · · · · · · · · · · ·	This is used when the 3L(or 3D) Y/C MODE is verified. [Do not adjust]
	[3L Y/C(LYC) =AV-27F703 _{/S} , AV-27F713/S / 3D Y/C(DYC)=AV-27F803 _{/S}]
(7) LOW LIGHT	This sets the setting values (adjustment values) of the W HITE BALANCE circuit.
(8) HIGH LIGHT	This sets the setting values (adjustment values) of the WHITE BALANCE circuit
(9) RF AFC	This is used when the RFAFC MODE is verified. [Do not adjust]
(10)VCO · · · · · · · · · · · · · · · · · · ·	This is used when the IF VCO is adjusted.
(11)I ² C BUS · · · · · · · · · · · · · · · · · · ·	This is used when ON/OFF of the I2C BUS CTRL is set. [Fixed ON]
(12)SYSTEM (SYS) · · · · · · · · · · · · · · · · · · ·	· This is used when the SYSTEM is verified. [Fixed value]

3. Basic Operations of the SERVICE MENU

(1) How to enter the SERVICE MENU.

Press the **SLEEP TIMER** key and set the **SLEEP TIMER** for $\lceil 0 \text{ MIN} \rceil$.

Then press the **DISPLAY** key and **VIDEO STATUS** key of the remote control unit at the same time to enter the SERVICE MENU screen.(FiG.1)

(2) SERVICE MENU screen selection

In SERVICE MENU, press the FUNCTION (\P/ \blacktriangle) key to select any of the SUB MENU items.

(The letters of the selected items are displayed in yellow.)

(3) Enter the any setting ($\operatorname{adjustment}$) mode

- 1. V/C(S), 2. DEF(D), 3. SOUND(A), 4. OTHERS(F),
 5. PIP(PIP), 6. 3L Y/C(LYC) [AV-27 F7 03/s / AV-27 F713/s] /
 3D Y/C(DYC) [AV-27 F803/s], 7. LOW LIGHT, 8. HIGH LIGHT,
 9. RF AFC, 10. VCO, 11. I²C BUS and 12. SYSTEM(SYS) mode.
 - If select any of 1. V/C(S) / 2. DEF(D) / 3. SOUND(A) / 4. OTHERS(F) / 5. PIP(PIP) / 6. 3L Y/C(LYC) [AV-27 F7 03/s / AV-27 F713/s] , 3D Y/C(DYC) [AV-27 F803/s] / 7. LOW LIGHT / 8. HIGH LIGHT / 9. RF AF C / 10. VCO / 11. I²C BUS / 12. SYSTEM(SYS) items, and the FUNCTION (◄/►) key is pressed from SERVICE MENU (MAIN MENU), the each screens will be displayed as shown in figure page later.
 - 2) Then the settings or verifications can be performed

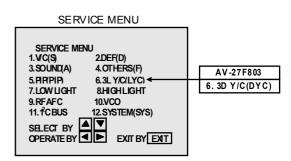
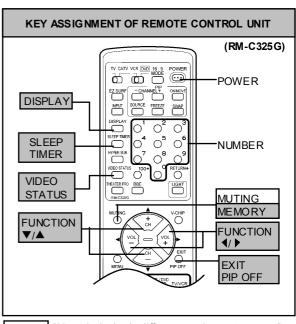
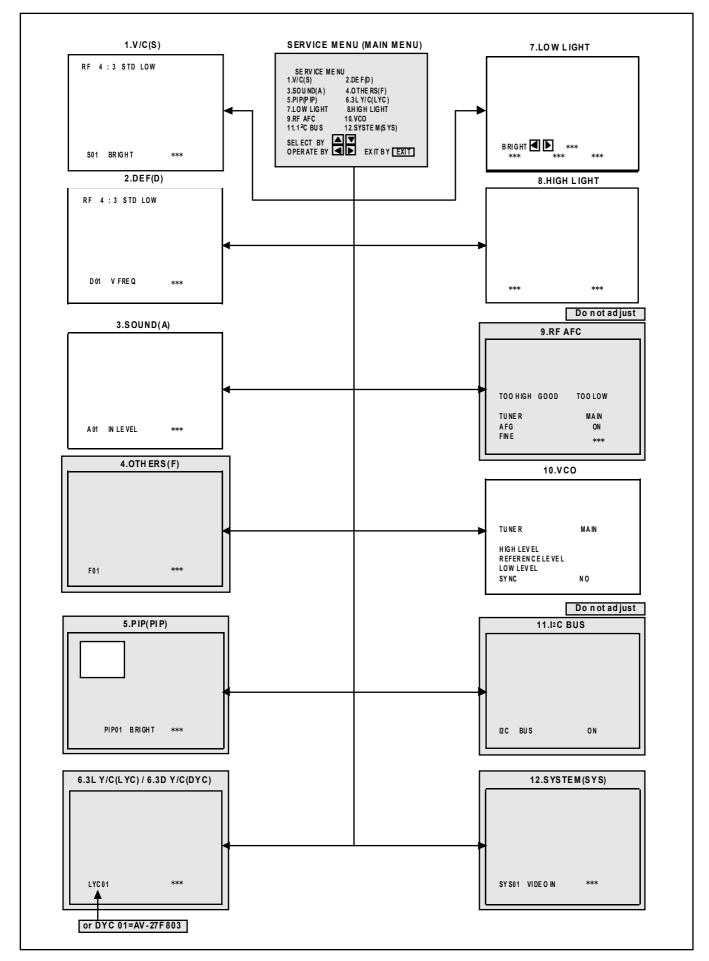


Fig.1

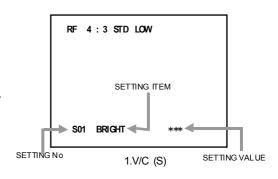


NOTE Although design is different, each remote controller has the same control function.



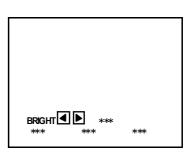
(4) Setting method

- FUNCTION (▼/▲) key. Select the SETTING ITEM.
- 2) FUNCTION (◀/▶) key Setting (adjust) the SETTING VALUE of the SETTING ITEM. When the key is released the SETTING VALUE will be stored (memorized).
- 3) EXIT key Returns to the previous screen.



(5) Releasing SERVICE MENU

- After returning to the SERVICE MENU upon completion of the setting (adjustment) work, press the EXIT key again.
- \bigstar The settings for LOW LIGHT and HIGH LIGHT are described in the WHITE BALANCE page of ADJUSTMENT.
- \bigstar The setting for MAIN VCO are described in the VCO page of ADJUSTMENT.



7.LOW LIGHT



8.HIGH LIGHT

TUNER MAIN
HIGH LEVEL
REFERENCE LEVEL
LOW LEVEL
SYNC NO

10.VCO

INITIAL SETTING VALUE OF SERVICE MENU

- 1. Adjustment of the SERVICE MENU is made on the basis of the initial setting values; however, the new setting values which set the screen in its optimum condition may differ from the initial setting.
- 2. Do not change the initial setting values of the setting (adjustment) items not listed in "ADJUSTMENT".

• V/C MODE

-- can not be adjustment

-		RF						STANDARD(4:3)			
No.	Setting item	AV-27F803/s			AV-27F703/s,AV-27F713/s			EXTERNAL (S,CV)		COMPONENT	
		STD(4:3)	STD(16:9)	THEATER (4:3)	STD(4:3)	STD(16:9)	THEATER (4:3)	AV-27 F8 03/s	AV-27 F7 03/S AV-27 F7 13/S	AV-27 F8 03/S	AV-27 F7 03 /S AV-27 F7 13 /S
S01	BRIGHT	64			64						
S02	PICTURE	60			60						
S03	COLOR	50			50					46	46
S04	TINT	68			68					72	72
S05	DETAIL	38			33			40	35	45	40
S06	BRIGHT +-		± 00	+01		± 00	+01	-01	-02	± 00	±00
S07	PICT+-		-08	-10		-08	-10	± 00	± 00	± 00	±00
S08	COLOR+-		± 00	-03		± 00	-03	-02	-02		<u> </u>
S09	TINT+-		± 00	-03		± 00	-03	+11	+05		
S10	DETAIL+-			± 00			±00				

		Initial setting value									
Na	0.44	RF/EXT (S,CV)				COMPONENT					
No.	Setting item	STAN	DARD THEATER		ATER	STANDARD		THEATER			
		LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH		
S11	R CUT OFF	30									
S12	G CUT OFF	30									
S13	B CUT OFF	30									
S14	R DRIVE	64									
S15	B DRIVE	64]		
S16	R CUT+-		± 00	± 00	± 00	-10					
S17	G CUT+-		± 00	± 00	± 00	± 00					
S18	B CUT +-		± 00	± 00	± 00	-10					
S19	R DRV+-		+05	+13	+07	± 00]		
S20	B DRV+-		+06	-25	-09	± 00					
S21	NTSC MAT	03	03	01	01	02	02	01	01		
S22	BLACKST	02		02							
S23	DCREST	01]	01]			 		
S24	DCRSW	01		01							

N	0 - 44 14	Initial setting value						
No.	Setting item	RF	EXTERNAL	COMPONENT				
S25	ASY SHRP	04	04	04				
S26	BPF FO	00	00					
S27	KILR OFF	00	00					
S28	KILR SEN	01	01					

No.	Setting item	Initial setting value	No.	Setting item	Initial setting value
S29	RGB MUTE	00	S39	YMUTE	00
S30	BLUE B	00	S40	SVMGAIN	03
S31	VIDEO SW	03	S41	SVMPH	01
S32	CMP ABCL	00	S42	WPL	00
S33	OSD ABCL	00	S43	COL GMM	00
S34	OSD CONT	07	S44	V1 GAIN	04
S35	SUB CONT	05	S45	AGC ADJ	63
S36	ABL GAIN	00	S46	VMOFF DE	+03
S37	ABL PNT	03	S47	APCCLK	01
S38	YGAMMA	01			

DEF MODE

-- can not be adjustment

		Init	tial setting va	l ue			Ini	tial setting va	lue
No.	Setting item	AV-27	F803/S,AV-27 AV-27F713/S		No.	Setting item	AV-27F803/S,AV-27F AV-27F713/S		=703/s
		RF (4:3)	RF (16:9)	EXT (4:3)			RF (4:3)	RF (16:9)	EXT (4:3)
D01	V FREQ	00	00	03	D18	WVMT BTM	00	01	00
D02	AFC GAIN	00	00	02	D19	EWCR TOP	12		12
D03	H POSI	20		20	D20	EWCR T+-		00	
D04	H POSI+-	-	00		D21	EWCR BTM	14		14
D05	VPHASE	00		00	D22	EWCR B+-		00	
D06	V PH+-		00		D23	EW PARA	36		36
D07	V SIZE	75		75	D24	EW PARA+-		-15	
D08	V SIZE+-		-30		D25	V EHT	00		00
D09	V CENTER	32		32	D26	V EHT+-		00	
D10	V CENT+-		00		D27	H EHT	00		00
D11	VS CORR	09		09	D28	H EHT+-		00	
D12	VS CO+-		00		D29	TRAPEZ	31		31
D13	V LIN	10		10	D30	TRAPEZ+-		00	
D14	V LIN+-		00		D31	V AGC	00	00	00
D15	H SIZE	33		33	D32	BLANK SW	00	00	00
D16	H SIZE+-		00		D33	VRMP BI	00	00	00
D17	WVMT TOP	00	01	00					

SOUND MODE

No.	Setting item	Initial setting value
A01	IN LEVEL	10
A02	LOW SEP	32
A03	HISEP	32
A04	SAPC	00
A05	BBE BASS	±00
A06	BBE TRE	-03

OTHERS MODE (Do not adjust)

Setting item do not display

		Initial set	ting value			Initial set	ting value
No.	Setting item	AV -27 F8 03/S	AV -27 F7 03/S AV -27 F7 13/S	No.	Setting item	AV -27 F8 03/S	AV -27 F7 03/S AV -27 F7 13/S
F01	OSD POSI	37	37	F15	VCSN 1	00	00
F02	OSD PREQ	90	90	F16	VCSN 2	10	10
F03	CCD POSI	39	39	F17	VCSN 3	20	20
F04	CCD FREQ	91	91	F18	VCSN STP	02	02
F05	CCD CONT	04	04	F19	VN DAT A	+08	+08
F06	PUR WBCK	00	00	F20	VM DAT B	-08	-08
F07	PUR CONT	02	02	F21	VM DAT C	-20	-20
F08	SN TYPE	01	02	F22	VM DAT D	-32	-32
F09	YCSN TM	05	05	F23	VM DAT E	01	01
F10	YCSN E	05	05	F24	VMOFF TY	02	02
F11	YCSN F	16	16	F25	YC VMOFF	255	255
F12	YCSN G	32	32	F26	EZSF T M	40	40
F13	VNR CHK	03	03	F27	XDSID TM	15	15
F14	VCSN TM	05	05	F28	FMTRAP	01	01

• 3L Y / C MODE (Do not adjust)

		Initial setting value					
No.	Setting item	AV -27 F7 03/S,AV-27F71 3/S					
LYC01	MODE	04					
LYC02	VENH	01					
LYC03	PDSOFF	00					
LYC04	СВ	00					
LYC05	VNLR	02					
LYC06	GSEL0	00					
LYC07	GSEL1	01					
LYC08	COR	00					
LYC09	TRAP	01					
LYC10	CHTRAP	00					
LYC11	CBPF	00					
LYC12	ENHOFF	00					

• 3DY / C MODE [AV-27F803/S]

No.	Setting item	Initial setting value	No.	Setting item	Initial setting value
DYC01	D7-0	21	DYC15	D7-0	09
DYC02	D7-4	00	DYC16	D7-0	241
DYC03	D1-0	00	DYC17	D7-0	37
DYC04	D7-0	193	DYC18	D7-0	08
DYC05	D7-3	04	DYC19	D7-0	68
DYC06	RF CDL	02	DYC20	D7-0	48
DYC07	EXT CDL	02	DYC21	D7-0	08
DYC08	D7-0	42	DYC22	D7-0	51
DYC09	D7-0	36	DYC23	D7-0	200
DYC10	D7-0	34	DYC24	D7-0	74
DYC11	D7-0	01	DYC25	D7-0	236
DYC12	D5-0	22	DYC26	D7-0	00
DYC13	D7-0	00	DYC27	D7-0	00
DYC14	D7-0	15	DYC28	3DYC	01

• PIP MODE (Do not adjust)[AV-27F803/S]

No.	Setting item	Initial setting value	No.	Setting item	Initial setting value
PIP01	BRIGHT	00	PIP27	UVPOLAR	00
PIP02	PICTURE	30	PIP28	MAT	01
PIP03	TINTI	42	PIP29	YCOR	01
PIP04	COLOR	06	PIP30	XFREQF	01
PIP05	R CUTOFF	00	PIP31	WTCHDG	01
PIP06	G CUTOFF	00	PIP32	COLON	00
PIP07	B CUTOFF	00	PIP33	ACQNEW	00
PIP08	R DRIVE	63	PIP34	DSTDET	01
PIP09	G DRIVE	65	PIP35	CRIBEOK	00
PIP 10	B DRIVE	65	PIP36	FCBEOK	00
PIP11	LPOSI	22	PIP37	NOCRID	00
PIP 12	R POSI	15	PIP38	NONSED	00
PIP 13	UPR POSI	12	PIP39	PIP ADJ	04
PIP 14	LWR POSI	11	PIP40	BRI EXT	00
PIP 15	PICT LCK	01	PIP41	PCT EXT	00
PIP 16	SELDEL	00	PIP42	TNT EXT	00
PIP 17	AGCFIX	01	PIP43	COR EXT	00
PIP 18	AGCADST	00	PIP44	R-D EXT	00
PIP 19	AGC	07	PIP45	G-D EXT	00
PIP20	BLKINVB	00	PIP46	B-D EXT	00
PIP21	BLKINVR	00	PIP47	BRT COMP	00
PIP 22	VSPDEL	00	PIP48	PCT COMP	00
PIP23	VSPISQ	01	PIP49	TNT COMP	40
PIP24	RGBIN	00	PIP50	COR COMP	05
PIP25	FRSEL	01	PIP51	R-D COMP	00
PIP26	OUTFOR	00	PIP52	G-D COMP	00
			PIP53	B-D COMP	00

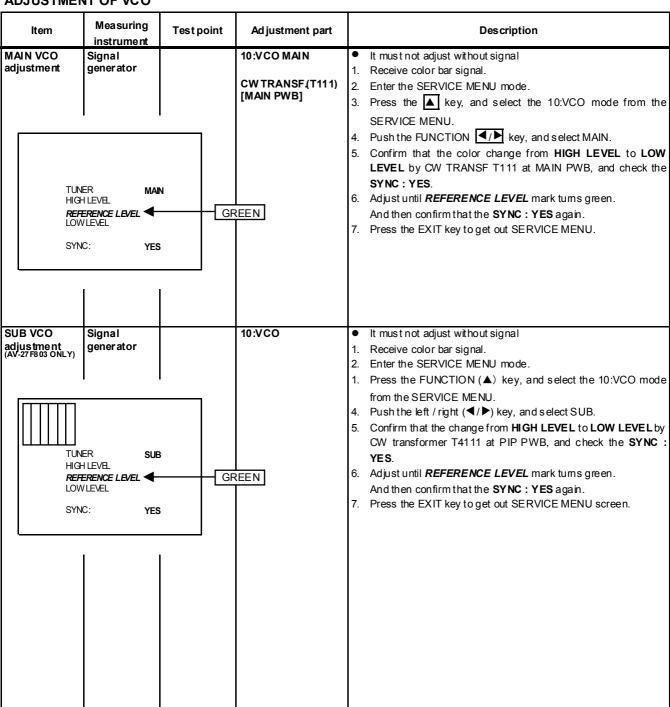
NOTE The AV-27F703/S, AV-27F713/S model do not have PIP function, But, if memory data is out of variable range, occasionally some problems happen. Then we need to input these data.

■ ADJUSTMENTS

B1 POWER SUPPLY

ltem	Measuring instrument	Test point	Ad justment part	Description
Check of B1 POWER SUPPLY	DC Voltmeter	[B1] Connector (pin1 & pin3) TP-91(pin1) TP-E(±):(pin3)		 Receive the black-and-whitesignal. (color off) Connect the DC voltmeter to 【B1】 connector pin【1】(TP-91) and TP-E(赤) (B1 connector pin【3】). Confirm that the voltage is DC134.5V±2V.

ADJUSTMENT OF VCO



ADJUSTMENT OF RF AGC

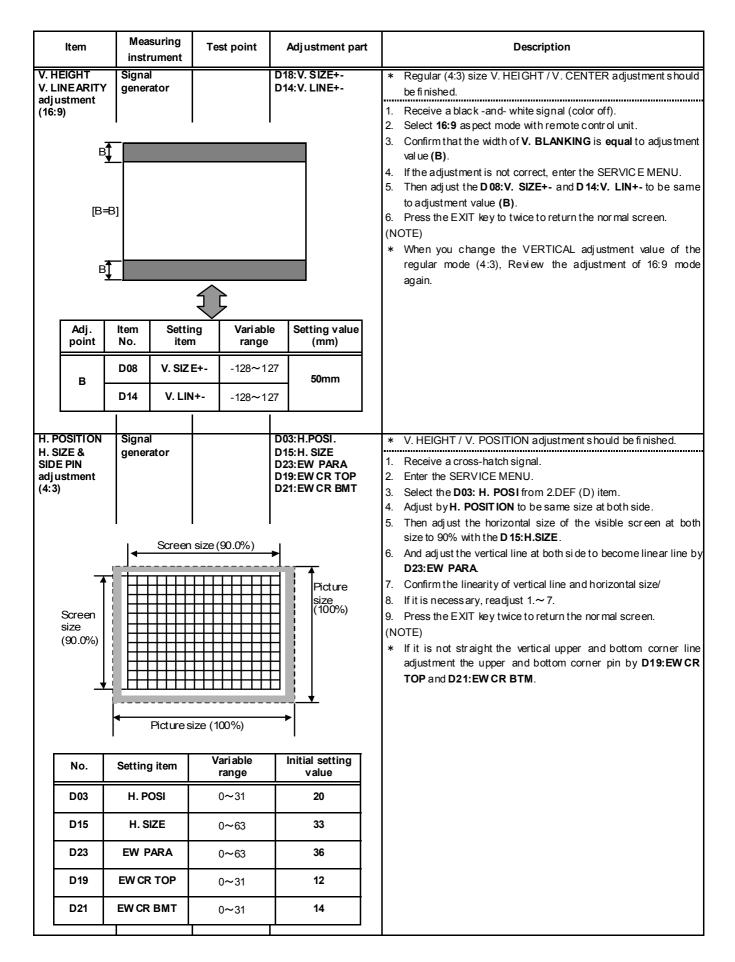
Iten	1	Measuring instrument	Test point	Ad justment part	Description
RF. AGC adjustment				S45:AGC ADJ	 Receive a black and white signal (color off). Select S45:AG C ADJ of the V/C MODE. Press the MUTING key and turn off color. With the FUNCTION ◀ key to get the noise in the screen picture (zero side of setting value).
No.	Set	ting item	Variable range	Initial setting value	 Press the FUNCTION ► key several times and step when noise disappears from the screen (at that time, not to increase
\$45	A	GC ADJ 0∼127		63	the value too much). 6. Change to other channels and make sure that there is no irregularity.
					7. Press the MUTING key and get color out.

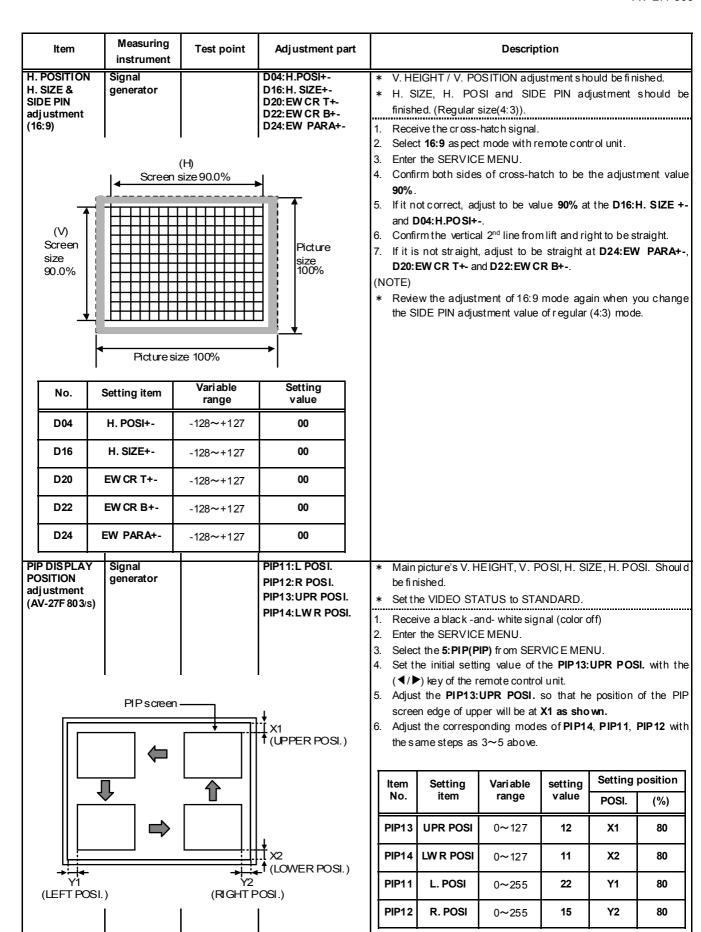
ADJUSTMENT OF FOCUS

Item	Measuring instrument	Test point	Ad justment part	Description
FOCUS adjustment	Signal generator		FOCUS VR [In HVT]	Receive the cross-hatch signal. While looking at the screen, adjust the FOCUS VR to the vertical and horizontal lines will be thinnest and sharpest center horizontal line. Make sure that the picture is in focus even when the screen gets darkened.

ADJUSTMENT OF DEFLECTION CIRCUIT

ltem	Measuring instrument	Test point	Ad justment part			De	scription	
V. HEIGHT V. CENTER adjustment (4:3)	Signal generator		D05:V PHASE D07:V SIZE V. CENTER SW (S1421) [MAIN PWB]	1. 2. 3. 4.	Enter th Select t that the Adjust t 90.0% v Bottom	value of D05:V PH the vertical screen with the D07:V SIZ is to be located wit	of the 2.DEF (D) IASE is 0. In size of the vis E and V CENTER In 85%~95% ran	ge.
 	Screen	n size	Picture	*	-	it by DEF SERVIC		nd D11: VS CORR.
Screen size			size (100%)		No.	Setting item	Variable range	Initial setting value
(90.0%)			∄		D05	V PHASE	0~7	00
			∄		D07	VSIZE	0~127	75
	Pictures	size (100%)	<u></u> -→					





ADJUSTMENT OF VIDEO / CHROMA CIRCUIT

ltem	Measuring instrument	Test point	Ad justment part		D	escription	
WHITE BALANCE (Low Light) adjustment	BRIGHT ■ No. 10	LIGHT] SCREEN]	S12:G CUTOFF S13:B CUTOFF SCREEN VR [in HVT]	2. Select 3. Confii B CU 0. Displation remotes the rem	TOFF and BRIGHT ay a single horizont the control unit. The screen VR all the the screen VR gra to one of the red, blue to the two colors we to that line that is dis keys of the remote the screen VR until the 20 key to cance to the BRIGHT leve s white slightly. The that whether the	node from the S g value of R C cal line by press e way to the left dually to the rig e or green colors hich did not ap played become control unit. the single horiz cel the single ho el to become t color ingredient which shines wh t can be seen, to and it is made into initial sett	ERVICE MENU. UTOFF, G CUTOFF sing the ① key of the component of R, G, or B is visible at look white. ERVICE MENU. UTOFF, G CUTOFF Service MENU. Service Mey of the component of R, G, or B is visible and to look white. Ing value.
	REMOTE CON			No.	Setting item	Variable range	Initial setting value
H	iline on Hiline (OFF EXIT		S11	R CUT OFF	0~255	30
R	CCUTOFF B CUTOFF			S12	G CUT OFF	0~255	30
R	4 5	•		S13	B CUT OFF	0~255	30
	7 8 9			S01	BRIGHT	0~127	64

*** [WHITE S	*** SCREEN]	S14:R DRIVE S15:B DRIVE	2.3.4.	Select Set the (4), (6) Adjust and (9) The (3)	, ⑦and ⑨ keys of the screen until it) keys of the remo	node in the SEF e of R DRIVE a f the remote con becomes white te control unit.	RVICE MENU. and B DRIVE with
[WHITE S			1		Setting item		
[WHITE S							
	SCREEN]			S14	R DRIVE	0~127	64
REMOTE CO				S15	B DRIVE	0~127	64
R DRIVE	B DRIV	PIP08:R DRIVE PIP10:B DRIVE	2.	Select SERVI Set th FUNCT Adjust	the PIP08:R DRIV CE MENU. ne corresponding TION (◀/▶) key o the PIP08:R DRIV	TE, PIP10:B DR initial settin	IVE, of the 5. PIP(P g values with ntrol unit.
				No . PIP 08 PIP 10	Setting item R DRIVE B DRIVE	Variable range 0~255 0~255	Initial setting value 63 65
·	R DRIVE A A CR DRIVE T Signal	R DRIVE B DRIV A 5 6 R DRIVE B DRIV 7 8 9 Signal	R DRIVE B DRIVE CONTROL B DRIVE B DRIVE B DRIVE B DRIVE B DRIVE PIP08:R DRIVE	R DRIVE 4 5 6 R DRIVE B DRIVE 7 8 9 Signal generator PIP 08:R DRIVE 1. 2. 3.	R DRIVE 4	B DRIVE A B DRIVE B DRIVE B DRIVE B DRIVE PIP 10:B DRIVE 1. Receive the black-and-wl 2. Select the PIP08:R DRIVE SERVICE MENU. 3. Set the corresponding FUNCTION (4. Adjust the PIP08:R DRIVE becomes white. No. Setting item PIP 08 R DRIVE	B DRIVE 4

Item	Measuring instrument	Test point	Adjustment part	Description
SUB BRIGHT adjustment			S01:BRIGHT	 Receive the broadcast and set the STANDARD mode. Enter the SERVICE MENU. Select S01:BRIGHT of the V/C(S) mode.
No.	Setting item	Variable range	Initial setting value	 4. Set the initial setting value of the S01. BRIGHT with the FUNCTION ◀/▶ key. 5. If the brightness is not the best with the initial setting value
S01	BRIGHT	0~127	64	make fine adjustment of the S01. BRIGHT until you get the optimum brightness.
SUB CONT RAST adjustment			S02:PICTURE	 Receive the broadcast and set the STANDARD mode. Enter the SERVICE MENU. Select S02:PICTURE of the V/C(S) mode. Set the initial setting value of the S02:PICTURE with the
No.	Setting item	Variable range	Initial setting value	 FUNCTION ◀/▶ key. If the contrast is not the best with the initial setting value, make fine adjustment of the S02:PICTURE until you get the optimum
S02	PICTURE	0~127	60	contrast.
SUB COLOR adjustment	Signal generator	 	S03:COLOR	[Method of adjustment without measuring instrument] 1. Receive the broadcast.
	Remote control unit			 Enter the SERVICE MENU. Select S03:COLOR of the V/C(S) mode. Set the initial setting value of the S03:COLOR with the FUNCTION ◀/▶ key.
No.	Setting item	Variable range	Initial setting value	5. If the color is not the best with the Initial setting value, make fine adjustment of the S03:COLOR until you get the optimum
S03	COLOR	0~127	50	color.
	Signal generator Os cill oscope Remote control unit	TP-B TP-E(♣) [CRT SOCKET PWB]	S03:COLOR	 Method of adjustment using measuring instrument] Input the full field color bar signal (75% white). Enter the SERVICE MENU. Set the RFAFC to OFF. Select S03:COLOR of the V/C(S) mode. Set the initial setting value of the S03:COLOR with the FUNCTION ◀/▶ key. Connect the oscilloscope between TP-B and TP-E. Adjust COLOR and bring the value of (A) in the illustration to the voltage shown in the table bellow. Reset the RFAFC setting position from OFF to ON.
	w Y	G R y Mg E	(A) (-) 	W-B [A]Voltage AV-27 F7 03/S AV-27 F7 13/S AV-27 F8 03/S AV-27 F8 03/S

ltem	Measuring instrument	Test point	Ad justment part			Г	Description	
SUB TINT adjustment	Signal generator Remote control unit	nerator note	 Method of adjustment without measuring instrument Receive the broadcast. Enter the SERVICE MENU. Select S04:TINT of the V/C(S) mode. Set the initial setting value of the S04:TINT value of the initial setting value of the S04:TINT value. If the tint is not the best with the initial setting value, madjustment of the S04:TINT until you get the optimum 					
					No.	Setting item	Variable range	Initial setting value 68
	Signal generator Os cill oscope Remote control unit	TP-B TP-E(**) [CRT SOCKET PWB]	S04:TINT	1. 2. 3. 4. 5. 6. 7.	Inpu Ente Set Set FUNC Con Adju	CTION ◀/▶ key. nect the oscillosco	bar signal (75% ENU. V/C(S) mode. g value of the pe between TP-the value of (B)	white). S04:TINT with B and TP-E. in the illustration to
	Y Cy W	G R B B Mg	(B) (-) (+)			W-Mg odels AV-27 F7 03/S AV-27 F7 13/S AV-27 F8 03/S	[B]Vol +26	

Item	Measuring instrument	Test point	Ad justment part			De	escription			
MTS INPUT LEVE L Ad justment	Sophometer	AUDIO OUT R pin	A01:IN LEVEL	2. 3. 4. 5. 6.	Enter Select Verify Conne Adjus with re	ve the cross-hatch of the SERVICE MEN to the A01:IN LEVEL of that the A01:IN LE ect the sophometer to the MTS input levernote control unit. The EXIT key to ret	IU. of the 3:SOUN VEL is set at its to AUDIO OUT el to 500mV(rm	ID(A) MODE. s initial setting value R pin. ns) by A01:IN LEV		
					No.	Setting item	Variable range	Initial setting value		
					A01	IN LEVEL	0~15	010		
MTS SEPARATION adjustment	TV audi o multiplex signal generator Os cill oscope	R OUT L OUT [AUDIO OUT]	signal generator to the anter Connect an oscilloscope to I display one cycle portion of the same of the service MENU. Enter the SERVICE MENU. Select the A02:LOW SEP. of the initial setting value FUNCTION (◄/▶) key. Adjust the A02:LOW SEP. 300Hz signal will become m Change the connection of the AUDIO OUT, and enlarge the Change the signal to 3 A03:HI SEP.				ntenna terminal. to R OUT pin of of the 300Hz sinu. P. of the 3:SOUI alue of the A02 P. so that the eminimum. If the oscilloscope the voltage ax 3kHz, and	R OUT pin of the AUDIO OUT, and the 300Hz signal. of the 3:SOUND(A) mode. e of the A02:LOW SEP. with the stroke element of the inimum. he oscilloscope to L OUT pin of the control of t		
L-Chai	nnel	R-Ch	annel		No.	Setting item	Variable range	Initial setting value		
signal	waveform	cross ↓ Minimun	talk portion		A02	LOW SEP.	0~63	032		
1 cycle		1			A03	HI SEP.	0~63	032		

HOW TO CHECK THE HIGH VOLTAGE HOLD DOWN CIRCUIT

1. HIGH VOLTAGE HOLD DOWN CIRCUIT

After repairing the high voltage hold down circuit shown in Fig. 1.

This circuit shall be checked to operate correctly.

2. CHECKING OF THE HIGH VOLTAGE HOLD DOWN CIRCUIT

- (1) Turn the power switch to on.
- (2) As shown in Fig. 1, set the resistor between S1 connector 2 and 3.
- (3) Make sure that the screen picture disappears.
- (4) Temporarily unplug the power plug.
- (5) Remove the resistor replaced S1 connector 2 and 3.
- (6) Again plug the power plug, make sure that the normal picture is displayed on the screen.

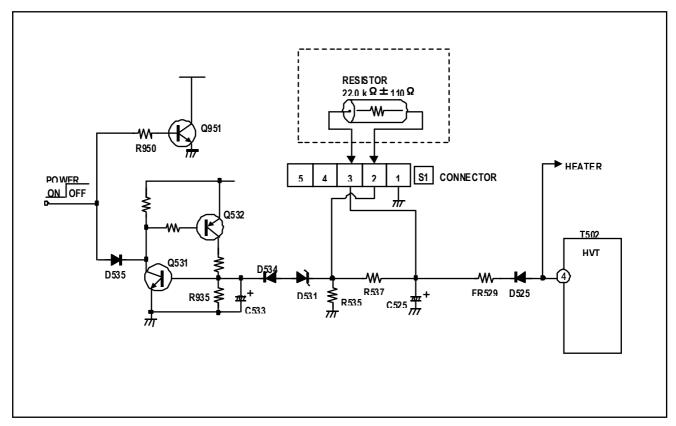


Fig. 1

REPLACEMENT OF CHIP COMPONENT

■ CAUTIONS

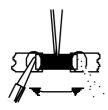
- 1. Avoid heating for more than 3 seconds.
- 2. Do not rub the electrodes and the resist parts of the pattern.
- 3. When removing a chip part, melt the solder adequately.
- 4. Do not reuse a chip part after removing it.

■ SOLDERING IRON

- 1. Use a high insulation soldering iron with a thin pointed end of it.
- 2. A 30 w s oldering iron is recommended for easily removing parts.

■ REPLACEMENT STEPS

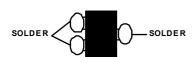
- 1. How to remove Chip parts
- ♦ Resistors, capacitors, etc
 - (1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.



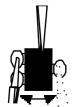
(2) Shift with tweezers and remove the chip part.



- ♦ Transistors, diodes, variable resistors, etc
 - (1) Apply extra solder to each lead.



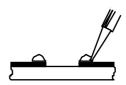
(2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.



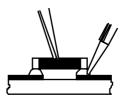
Note: After removing the part, remove remaining solder from the pattern.

2. How to install Chip parts

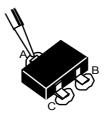
- Resistors, capacitors, etc
 - (1) Apply solder to the pattern as indicated in the figure.



(2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.



- ♦ Transistors, diodes, variable resistors, etc
 - (1) Apply solder to the pattern as indicated in the figure.
 - (2) Grasp the chip part with tweezers and place it on the solder.
 - (3) First solder lead **A** as indicated in the figure.



(4) Then solder leads **B** and **C**.



PARTS LIST

CAUTION

- The parts identified by the ⚠ symbol are important for the safety. Whenever replacing these parts, be sure to use specified ones to secure the safety.
- The parts not indicated in this Parts List and those which are filled with lines —— in the Parts No. columns will not be supplied.
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS		
CR	Carbon Resistor	C CAP.	Ceramic Capacitor	
FR	Fusible Resistor	E CAP.	Electrolytic Capacitor	
PR	Plate Resistor	M CAP.	Mylar Capacitor	
VR	Variable Resistor	HV CAP.	High Voltage Capacitor	
HVR	High Voltage Resistor	MF CAP.	Metalized Film Capacitor	
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor	
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor	
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor	
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor	
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor	
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor	
CHVR	Chip Variable Resistor	TAN. CAP.	Tantalum Ca pacitor	
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor	
COMP.R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor	
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor	
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor	
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor	
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor	

	TOLERANCES								
F	G	J	К	М	N	R	Н	Z	Р
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

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USING P.W. BOARD & REMOTE CONTROL UNIT

Model P.W.B ASS'Y	AV-27F703/S	AV-27F713/S	AV-27F 803/S
MAIN PWB	SGJ-1004A-M2	SGJ-1003A-M2	SGJ-1002A-M2
CRT SOCKET PWB	SGJ-3002A-M2	←	←
PIP PWB			SGJ-4001A-M2
AV SEL PWB	SGJ-5002A-M2	←	SGJ-5001A-M2
FRONT CONTROL PWB	SGJ-6001A-M2	₩	←
LED & POWER SW PWB	SGJ-7001A-M2		←
3D Y/C SEP MODULE PWB			SGJ0Y001A-M2
REMOTE CONTROL UNIT	RM-C326G-1A	RM-C326-1A	RM-C325G-1A

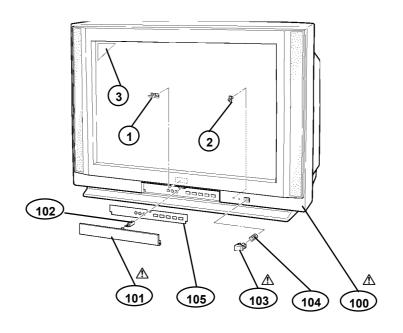
EXPLODED VIEW PARTS LIST(1)

[AV-27I	[AV-27F703/s]					
⚠ Ref.No.	Part No.	Part Name	Description			
1 2 3 100 101 102 102 103 104 105	CM48006-008-C LC30191-003A-A GQ40020-004A-A LC10878-003B-A LC20628-001C-A CM48229-00A-C LC31237-001A-A CM36481-002A-A LC31238-004A-A	JVC MARK REMOCON LENS CORNER STICKER FRONT CABI ASSY DOOR DOOR LATCH KNOB(POWER) SPRING OPERATION SHEET	Inc.No.101∼105			

[AV-27F713/s]					
⚠ Ref.No.	Part No.	Part Name	Description		
1 2 3 \$\Delta\$ 100 \$\Delta\$ 101 102 \$\Delta\$ 103 104 105	CM48006-009-C LC30191-003A-A GQ40020-005A-A LC10878-004A-A LC20628-002A-A CM48229-00A-C LC31237-002A-A CM36481-002A-A LC31238-005A-A	JVC MARK REMOCON LENS CORNER STICKER FRONT CABI ASSY DOOR DOOR LATCH KNOB(POWER) SPRING OPERATION SHEET	Inc.No.101∼105		

[AV-27F	[AV-27F803/S]							
⚠ Ref.No.	Part No.	Part Name	Description					
1 2 3 100 101 102 103 104 105	C M4 80 0 6 - 00 8 - C L C3 01 9 1 - 00 3 A - A G Q4 00 2 0 - 00 6 A - A L C1 08 7 8 - 00 3 B - A L C2 06 2 8 - 00 1 C - A C M4 82 2 9 - 00 A - C L C3 12 3 7 - 00 1 A - A C M3 64 8 1 - 00 2 A - A L C3 12 3 8 - 00 4 A - A	JVC MARK REMOCON LENS CORNER STICKER FRONT CABI ASSY DOOR DOOR LATCH KNOB(POWER) SPRING OPERATION SHEET	Inc.No.101∼105					

EXPLODED VIEW (1)



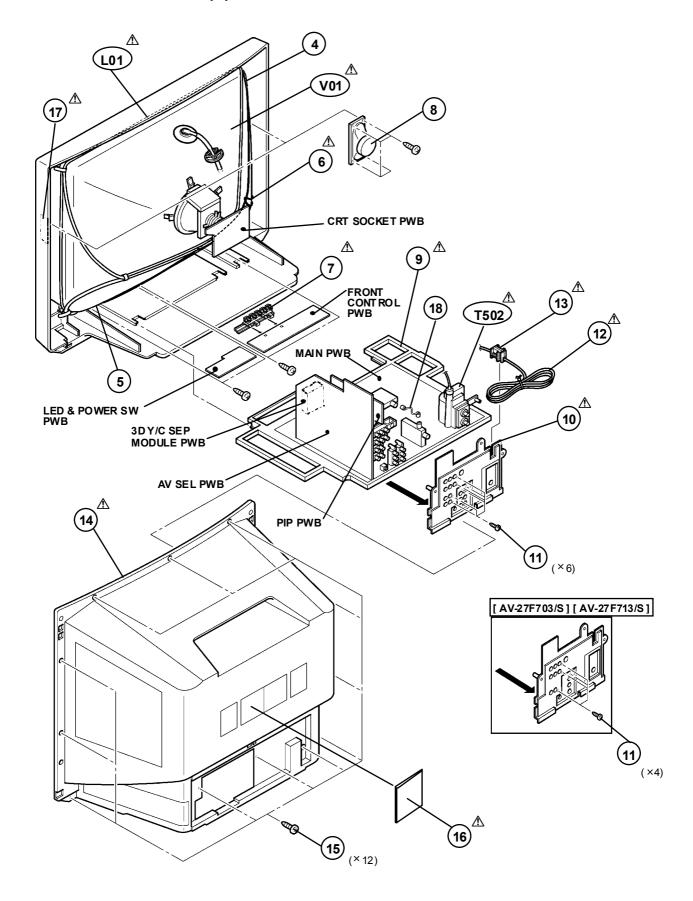
EXPLODED VIEW PARTS LIST(2)

[AV-27	F703/s]		
⚠ Ref.No.	Part No.	Part Name	Description
↑ V01 ↑ L01 ↑ T502 ↓ 5 ↑ 7 ↑ 7 ↑ 9 ↑ 10	A 68 QC P 89 3X 0 01 QQW00 9 0 - 00 1 QQH 01 21 - 00 1 A 48 45 7 - 4 - S WJY 00 1 6 - 00 1 A WJY 00 1 3 - 00 3 A LC2 0 2 1 7 - 0 0 4 B - A QAS 0 1 10 1 - 00 1 LC1 0 8 8 3 - 00 1 C - A LC2 0 8 9 9 - 00 4 A - A	ITC DEGAUSSING COIL FB TRANSF SPRING E-BRAIDED ASSY E-BRAIDED SUB ASSY CONTROL KNOB SPEAKER CHASSIS BASE TERMINAL BOARD	Inc.DY,PC MAGNET,WEDGE (x2)SP01-02
↑ 11 ↑ 12 ↑ 13 ↑ 14 ↑ 15 ↑ 16 ↑ 17	QYS BS B 30 10 Z QMP D2 00 - 200 - J C L C2 01 0 6 - 00 1 D - A L C1 08 8 0 - 00 1 D - A QYS BS F G4 01 6 Z GQ3 00 3 2 - 00 1 A - A GQ3 00 3 4 - 00 1 B - A	SCREW POWER CORD POWER CORD CLAMP REAR COVER SCREW RATING LABEL WARNING LABEL	(x4) or QMPD390-200-JS Within MAIN PWB(CM (x12)

[AV-27F713/s]				
⚠ Ref.No.	Part No.	Part Name	Description	
↑ V01 ↑ L01 ↑ T502 4 5 6 ↑ 7 8 ↑ 9 ↑ 10 ↑ 11 ↑ 12 ↑ 13 ↑ 14 ↑ 15 ↑ 16	A68QCP893X001 QW0090-001 QH0121-001 A48457-4-5 WJY0016-001A WJY0013-003A LC20217-006A-A QAS0101-001 LC10883-001C-A LC20899-004A-A QYSBSB3010Z QMPD200-200-JC LC20106-001D-A QYSBSFG4016Z GQ30032-001A-A GG30032-001B-A	ITC DEGAUSSING COIL FB TRANSF SPRING E-BRAIDED ASSY E-BRAIDED SUB ASSY CONTROL KNOB SPEAKER CHASSIS BASE TERMINAL BOARD SCREW POWER CORD OF POWER CORD CLAMP REAR COVER SCREW RATING LABEL WARNING LABEL	Inc.DY,PC MAGNET,WEDGE (x2)SP01-02 (x4) QMPD390-200-JS Within MAIN PWB(CN0 (x12)	

[AV-27F803/s]				
⚠ Ref.No.	Part No.	Part Name	Description	
↑ V01 ↑ L01 ↑ T502 4 5 6 ↑ 7 8 ↑ 9 ↑ 10 ↑ 11 ↑ 12 ↑ 13 ↑ 14 ↑ 16	A 68 QC P 89 3X 0 01 QW 00 90 - 00 1 Q 0H 01 21 - 00 1 A 48 45 7 - 4 - 5 WJY 00 16 - 00 1 A WJY 00 13 - 00 3 A LC 2 02 17 - 00 4 B - A QAS 01 01 - 00 1 LC 10 8 8 3 - 00 1 C - A LC 2 08 9 9 - 00 5 A - A QYS BS B 30 10 Z QMP D2 00 - 200 - JC LC 2 01 06 - 00 1 D - A LC 1 08 8 0 - 00 1 D - A QYS BS F 00 1 C - A	ITC DEGAUSSING COIL FB TRANSF SPRING E-BRAIDED ASSY E-BRAIDED SUB ASSY CONTROL KNOB SPEAKER CHASSIS BASE TERMINAL BOARD SCREW POWER CORD POWER CORD POWER CORD REAR COVER SCREW RATING LABEL	Inc.DY,PC MAGNET,WEDGE (x2)SP01-02 (x6) or QMPD390-200-JS Within MAIN PWB(Cl	
⚠ 16 ⚠ 17 18	G Q 3 00 3 4 - 00 1 B - A W J X 00 1 4 - 00 2 A	WARNING LABEL E-COAXIAL ASSY	[AV-27F803/S ONLY]	

EXPLODED VIEW (2)



[AV-27F703/S] [AV-27F713/S] [AV-27F803/S]

PRINTED WIRING BOARD PARTS LIST

MAIN P.W. BOARD ASS'Y

(SGJ-1004A-M2)[AV-27F703/s] / (SGJ-1003A-M2)[AV-27F713/s] / (SGJ-1002A-M2)[AV-27F803/s]

<u>∧</u> Symbol No.	Part No.	Part Name	Description	Symbol No.	Part No.	Part Name	Description
△ CNOPW △ OR △ FR525 △ FR527 △ TU001 △ TU001 IC101	OMPD00-200-JC QMPD090-200-JS QRZ9017-4R7 QRZ9011-470 QAU@72-001 QAU@74-001 M52342SP	POWER CORD POWER CORD F R F R TUNER, 803S TUNER, 7135/703S IC	4.7Ω 1/4W J 47Ω 1/2W J	D654 D700 D701 D703 D704 D705 D706 D707	155133 MTZJ5.6B 155133 MTZJ5.6B MTZJ5.6B 155133 MTZJ5.6B MTZJ5.6B	DIODE, 803S ZENER DIODE DIODE ZENER DIODE ZENER DIODE DIODE ZENER DIODE ZENER DIODE ZENER DIODE	
10201 Δ 10421 10601 10602 10621 10702 10708 10704 10851	M5.23425P TM8812C5BNG3U68 LA7841 TA1287F M5.2055FP LA4485 AT24C08-32F803 S-80840CNY-T AN78L05 BA12T	IC IC IC, 803S IC, 803S IC IC IC IC IC	(SERVICE)	D708 D709 D721 D722 D723 D810 △ D901	MTZJ5.6B MTZJ5.6B 1SSI33 1SSI33 MTZJ5.6B MTZJ5.6B GSIB460-S1 MA700A	ZENER DIODE ZENER DIODE DIODE, 803S DIODE, 803S ZENER DIODE ZENER DIODE BRIDGE DIODE SB DIODE SB DIODE	
OR IC852 OR IC853 OR ≜ IC911 ≜ IC921 Q001 Q101 Q101 Q131 Q161	MPC2412AHF AN7809F BA17809T AN7805F BA17805T STR-G6624/F8 SE13SN UN2212 2SC5083/L-P/-T 258709A/QR/-X 250601A/QR/-X	IC TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		△ D911 △ D912 △ D913 D914 D915 D917 D918 D920 D931 D933	RGP10J-5025-T3 RGP10J-5025-T3 RGP10J-5025-T3 1SS133 SARS01 MTZJ30A MTZJ5.1C 1SS133 RU30A-F1 RU3W-LFC4	DIODE DIODE DIODE DIODE DIODE DIODE ZENER DIODE ZENER DIODE DIODE DIODE DIODE DIODE	
Q161 Q211 Q232 Q233 Q352 Q353 Q431 Q501	25D601A/QR/-X 25D601A/QR/-X 25D601A/QR/-X 25D601A/QR/-X 25D601A/QR/-X UN2212 25C4212/Z1/ 25D445-VD	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR DIGI TRANSISTOR TRANSISTOR TRANSISTOR POWER TRANSISTO	н.оит	0935 0941 0945 0952 0953 0954 0955 0956 0957	RU3WX-LFC4 MTZJ33A MTZJ9.1B 1SS133 1SR35-400A-T2 1SR35-400A-T2 1SR35-400A-T2 1SR35-400A-T2 MTZJ15C	DIOGE ZENER DIODE ZENER DIODE DIODE DIODE DIODE DIODE DIODE DIODE DIODE ZENER DIODE	
0541 0542 0543 0622 0623	2SC2/85/JH/-1 2SB709A/QR/-X 2SB709A/QR/-X 2SB709A/QR/-X 2SD1408/0Y/-LB 2SD601A/QR/-X IN2717	SI TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR POW TRANSISTOR TRANSISTOR DIGI TRANSISTOR TRANSISTOR, 803S TRANSISTOR TRANSISTOR, 803S TRANSISTOR, 803S		D972 D973 R002 R003 R004 R005 R008 R009 R101	MIZJISL 1SS133 NRSA63J-OROX NRSA63J-101X NRSA63J-0ROX NRSA63J-82OX NRSA63J-682X NRSA63J-562X	DIODE DIODE MG R	0. ΩΩ 1/16W J 10ΩΩ 1/16W J 10ΩΩ 1/16W J 0.ΩΩ 1/16W J 82Ω 1/16W J 6.8ΚΩ 1/16W J 5.6ΚΩ 1/16W J
0700 0701 0705 0951 0971 0305 0306 0307 0308 0309	25D@1A/QR/-X 25B709A/QR/-X 25D001A/QR/-X 25D1838K/AB/-X 25A1208/ST/Z1-T 15S133 15S133 15S133 15S133 15S133 15S133 15S133	TRANSISTOR TRANSISTOR TRANSISTOR DIODE		R102 R103 R104 R105 R111 R112 R113 R115	NRSA63J-182X QRE121J-101Y NRSA63J-180X NRSA63J-270X NRSA63J-394X NRSA63J-334X NRSA63J-101X NRSA63J-101X	MG R C R MG R MG R MG R MG R MG R	1.8 kΩ 1/16W J 10QΩ 1/2W J 18Ω 1/16W J 27Ω 1/16W J 390 kΩ 1/16W J 300 kΩ 1/16W J 10QΩ 1/16W J 10QΩ 1/16W J 68Ω 1/16W J
D352 D353 D354 D421 D422 D432 D501 ▲ D502	MTZJ9.1C 1SS133 MTZJ3.3A 1N4003 MTZJ75 1SS133 RH3G-F1 RU3AM-LFC4 RGP10J-5025-T3 RH1S-T3	ZENER DIODE DIODE ZENER DIODE DIODE ZENER DIODE DIODE DIODE DIODE DIODE		R116 R117 R118 R131 R132 R133 R134 R135	NRS/63J - 680X NRS/63J - 273X NRS/63J - 223X NRS/63J - 102X NRS/63J - 311X NRS/63J - 361X NRS/63J - 561X NRS/63J - 102X	MG R MG R MG R MG R MG R MG R MG R MG R	2/kΩ 1/16W J 22kΩ 1/16W J 1kΩ 1/16W J 33QΩ 1/16W J 82QΩ 1/16W J 56QΩ 1/16W J
D507 D521 D523 D525 D526 D527 D529 ▲ D531	RHIS-T3 RGP10J-5025-T3 1558L-T5 15S8L-T5 15R124-400A-T2 MTZ.99.1C MA4068N/Z1/-T2 QUV153-050Y 155133	DIODE DIODE DIODE DIODE DIODE DIODE ZENER DIODE ZENER DIODE IM BUS WIRE		R161 R162 R163 R164 R165 R166 R167 R168	NRSA63J - 332X NRSA63J - 0R0X NRSA63J - 223X NRSA63J - 102X NRSA63J - 223X NRSA63J - 103X NRSA63J - 102X NRSA63J - 101X	MG R MG R MG R MG R MG R MG R MG R	1kΩ 1/16W J 3.3kΩ 1/16W J 0.0Ω 1/16W J 22kΩ 1/16W J 1kΩ 1/16W J 22kΩ 1/16W J 10kΩ 1/16W J 10kΩ 1/16W J 10kΩ 1/16W J 10kΩ 1/16W J
D535 D537 D601 D602 D603 D604 D605 D606 D653	15133 15R35-400A-T2 MTZJ9.1C MTZJ9.1C MTZJ9.1C MTZJ9.1C MTZJ9.1C MTZJ9.1C 155133	DIODE DIODE JENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE, 803S ZENER DIODE, 803S DIODE, 803S		R169 R171 R201 R212 R215 R216 R217	NRSA63J - 561X NRSA63J - 103X NRSA63J - 223X NRSA63J - 272X NRSA63J - 562X NRSA63J - 562X NRSA63J - 102X	MG R MG R MG R MG R MG R MG R MG R	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

Δ	Symbol No.	Part No.	Part Name	Description	<u>∧</u> Symbol No.	Part No.	Part Name	Description
	R222 R227	NRSA63J-OROX NRSA63J-104X	MG R MG R	0.0Ω 1/16W J 100kΩ 1/16W J	<u></u>	QRK126J-150X QRX029J-3R3	C R MF R	15Ω 1/2W J 3.3Ω 2W J
	R231	NRSA63J-182X	MG R	1.8kΩ 1/16W J	R601	NRSA63J-750X	MG R	75Ω 1/16W J
	R237 R238	NRSA63J-392X NRSA63J-473X	MG R MG R	3.9kΩ 1/16W J 47kΩ 1/16W J	R602 R603	NRSA63J-750X NRSA63J-750X	MG R MG R	75Ω 1/16W J 75Ω 1/16W J
	R241	NRSA63J-332X	MG R	3.3kΩ 1/16W J	R604	NRSA63J-750X	MĠ R MG R	75Ω 1/16W J, 803S
	R243 R281	NRSA63J-152X NRSA63J-182X	MG R MG R	1.5kΩ 1/16W J 1.8kΩ 1/16W J	R605 R606	NRSA63J-750X NRSA63J-750X	MG R	75Ω 1/16W J, 803S 75Ω 1/16W J, 803S
	R282 R283	NRSA63J-392X NRSA63J-681X	MG R MG R	3.9kΩ 1/16W J 680Ω 1/16W J	R610 R611	NRSA63J-OROX NRSA63J-OROX	MG R MG R	0.0Ω 1/16W J, 713S/703S 0.0Ω 1/16W J, 713S/703S
	R286 R287	NRSA63J-472X	MG R MG R	4.7kΩ 1/16W J	R614 R615	NRSA63J-682X NRSA63J-332X	MG R MG R	6.8kΩ 1/16W J, 803S
	R287 R288	NRSA63J-101X NRSA02J-471X	MG R MG R	100 _Ω 1/16W J 470 _Ω 1/10W J	R615 R616	NRSA63J-332X NRSA63J-332X	MG R MG R	3.3kΩ 1/16W J, 803S 3.3kΩ 1/16W J, 803S
	R289	NRSA63J-154X	MG R	150kΩ 1/16W J	R617	NRSA63J-332X	MG R	3.3kΩ 1/16W J, 803S
	R290 R292	NRSA02J-561X NRSA63J-124X	MG R MG R	560Ω 1/10W J 120kΩ 1/16W J	R618 R621	NRSA63J-332X NRSA63J-682X	MG R MG R	3.3kΩ 1/16W J, 803S 6.8kΩ 1/16W J
	R293	NRSA63J-224X	MG R	220kΩ 1/16W J	R622	NRSA63J-681X	MG R	68ΩΩ 1/16W J
	R301 R302	NRSA63J-222X NRSA63J-222X	MG R MG R	2.2kΩ 1/16W J 2.2kΩ 1/16W J	R623 R624	NRSA63J-682X NRSA63J-681X	MG R MG R	6.8kΩ 1/16W J 68QΩ 1/16W J
	R303 R304	NRSA63J-222X NRSA63J-101X	MG R MG R	2.2kΩ 1/16W J 100Ω 1/16W J	R626 R627	NRSA63J-223X NRSA63J-223X	MG R MG R	22kΩ 1/16W J 22kΩ 1/16W J
	R305	NRSA63J-101X	MG R	100Ω 1/16W J	R631	NRSA63J-333X	MG R	33kΩ 1/16W J
	R306 R318	NRSA63J-101X NRSA63J-472X	MG R MG R	100Ω 1/16W J 4.7kΩ 1/16W J	R632 R638	NRSA63J-223X NRSA63J-0R0X	MG R MG R	22kΩ 1/16W J 0.QΩ 1/16W J
	R319	NRSA63J-102X	MG R	1kΩ 1/16W J	R639	NRSA63J-OROX	MG R	0.0Ω 1/16W J
	R352 OR	QRE141J-103Y NRSA63J-103X	C R MG R	10kΩ 1/4W J 10kΩ 1/16W J	R651 R652	NRSA63J-OROX NRSA63J-OROX	MG R MG R	0.0Ω 1/16W J, 713S/703S 0.0Ω 1/16W J, 713S/703S
	R354	NRSA63J-OROX	MG R	0.0Ω 1/16W J	R653	NRSA63J-OROX	MG R	0.0Ω 1/16W J, 713S/703S
	R355 R356	NRSA63J-OROX NRSA63J-123X	MG R MG R	0.0Ω 1/16W J 12kΩ 1/16W J	R655 R700	NRSA63J-153X NRSA63J-102X	MG R MG R	15kΩ 1/16W J, 803S 1kΩ 1/16W J
	R357 R358	NRSA63J-OROX	MG R MG R	0.0 <u>Ω</u> 1/16W J 33kΩ 1/16W J	R701 R702	NRSA63J-103X NRSA63J-102X	MG R MG R	10kΩ 1/16W J 1kΩ 1/16W J
	R359	NRSA63J-333X NRSA63J-103X	MG R	10kΩ 1/16W J	R704	NRSA63J-472X	MG R	4.7kΩ 1/16W J
	R360 R361	NCB31HK-103X QRE141J-0R0Y	C CAP. C R	0.01μF 50V K 0.0Ω 1/4W J	R705 R706	NRSA63J-472X NRSA63J-472X	MG R MG R	4.7kΩ 1/16W J 4.7kΩ 1/16W J
	R421	NRS <i>A</i> 63J-822X	MG R	8.2kΩ 1/16W J	R707	NRSA63J-103X	MG R	10kΩ 1/16W J
	R423 R424	NRS <i>A</i> 63J-393X NRS <i>A</i> 63J-393X	MG R MG R	39kΩ 1/16W J 39kΩ 1/16W J	R708 R709	NRSA63J-101X NRSA63J-101X	MG R MG R	10Q _Ω 1/16W J 10QΩ 1/16W J
	R426	NRSA63J-183X	MG R	18kΩ 1/16W J	R714	NRSA63J-823X	MG R	82kΩ 1/16W J, 803S
	R427 R429	QRT029J-1R2 NRSA63J-272X	MF R MG R	1.2Ω 2W J 2.7kΩ 1/16W J	R715 R718	NRSA63J-103X NRSA63J-223X	MG R MG R	10kΩ 1/16W J 22kΩ 1/16W J
	R430 R431	NRSA63J-OROX NRSA63J-152X	MG R MG R	0.0 <u>Ω</u> 1/16W J 1.5k <u>Ω</u> 1/16W J	R721 R728	NRSA63J-102X NRSA63J-102X	MG R MG R	1kΩ 1/16W J 1kΩ 1/16W J
	R432	NRSA63J-101X	MG R	100Ω 1/16W J	R729	NRSA63J-223X	MG R	22kΩ 1/16W J
	R433 R434	NRS <i>A</i> 63J-681X QRL029J-181	MG R OM R	680Ω 1/16W J 180Ω 2W J	R731 R732	NRSA63J-101X NRSA63J-101X	MG R MG R	10Ω 1/16W J 10Ω 1/16W J
	R435 R441	QRE121J-102Y	C R	1kΩ 1/2W J	R733 R734	NRSA63J-472X	MG R MG R	4.7kΩ 1/16W J
	R441 R447	NRSA63J-OROX NRSA63J-104X	MG R MG R	0.0 <u>Ω</u> 1/16W J 100kΩ 1/16W J	R734 R737	NRSA63J-472X NRSA63J-472X	MG R	4.7kΩ 1/16W J 4.7kΩ 1/16W J, 803S
	R448	NRSA63J-473X	MG R	47kΩ 1/16W J	R739	NRSA63J-OROX	MG R MG R	0.0Ω 1/16W J
	R449 R453	NRS <i>A</i> 63J-822X QRE121J-102Y	MG R C R	1kΩ 1/2W J	R740 R754	NRSA63J-103X NRSA63J-472X	MG R	4.7kΩ 1/16W J, 803S
	R501 R502	NRSA63J-OROX NRSA63J-271X	MG R MG R	0.0Ω 1/16W J 270Ω 1/16W J	R755 R756	NRSA63J-153X NRSA63J-103X	MG R MG R	15kΩ 1/16W J, 803S 10kΩ 1/16W J, 803S
	R503	QRE121J-103Y	C R	10kΩ 1/2W J	R764	NRSA63J-221X	MG R	220 _Ω 1/16W J
	R504 R505	QRL039J-152 ORL039J-182	OM R OM R	1.5kΩ 3W J 1.8kΩ 3W J	R765 R766	NRSA63J-221X NRSA63J-221X	MG R MG R	22Ω 1/16W J 22Ω 1/16W J
	R511	QRE121J-220Y	C R	22Ω 1/2W J	R767	NRSA63J-221X	MG R	220Ω 1/16W J
	R512 R513	QRE121J-681Y QRL039J-273	C R OM R	680Ω 1/2W J 27kΩ 3W J	R769 R772	NRSA63J-682X NRSA63J-103X	MG R MG R	6.8kΩ 1/16W J 10kΩ 1/16W J
	R523 R526	QRE141J-563Y ORE121J-272Y	C R C R	56kΩ 1/4W J 2.7kΩ 1/2W J	R775 R776	NRSA63J-473X NRSA63J-103X	MG R MG R	47kΩ 1/16W J, 803S 10kΩ 1/16W J, 803S
	R527	QRE121J-124Y	C R	120kΩ 1/2W J	R811	NRSA63J-473X	MG R	47kΩ 1/16W J
	R528 R529	QRE121J-154Y NRSA63J-331X	C R MG R	150kΩ 1/2W J 330Ω 1/16W J	R812 R816	NRSA63J-102X NRSA63J-124X	MG R MG R	1kΩ 1/16W J 120kΩ 1/16W J
	R531	QRJ146J-391X	C R	390Ω 1/4W J	R821	NRSA63J-184X	MG R	180kΩ 1/16W J
	R532 R533	NRSA63J-273X NRSA63J-123X	MG R MG R	27kΩ 1/16W J 12kΩ 1/16W J	R822 R822	NRSA63J-OROX NRSA63J-124X	MG R MG R	0.0Ω 1/16W J, 713S/703S 120kΩ 1/16W J, 803S
Δ	R534 R535	NRSA63J-123X NRVA02D-222X	MG R MF R	12kΩ 1/16W J 2.2kΩ 1/10W D	R827 R855	NRSA63J-102X QRX039J-6R8	MG R MF R	1kΩ 1/16W J 6.8Ω 3W J
Δ	R537	NRZ0032-7151X	MF R	7.15kΩ 1/10W±0.5%	R857	QRL029J-820 QRL029J-390	OM R	82Ω 2 W J
	R538 R543	NRS <i>A</i> 63J-333X QRE121J-122Y	MG R C R	33kΩ 1/16W J 1.2kΩ 1/2W J	R858 <u>∧</u> R901	QRL029J-390 QRF074K-R47	OM R UNF R	39 <u>Ω</u> 2W J, 803S 0.47Ω 7W K
	R544	QRE121J-392Y QRE121J-822Y	C R	3.9kΩ 1/2W J	<u></u> № R909	QRG01GJ-470	OM R	47Ω 1W J
	R545 R546	QRE121J-822Y NRSA63J-331X	C R MG R	8.2kΩ 1/2W J 330Ω 1/16W J	R911 R912	QRE121J-223Y QRT029J-R18	C R MF R	22kΩ 1/2w J 0.18Ω 2w J
	R547 R548	NRSA63J-104X QRE121J-152Y	MG R C R	100kΩ 1/16W J 1.5kΩ 1/2W J	R913 ∆ R914	QRT029J-R15 QRK126J-681X	MF R	0.15Ω ZW J 680Ω 1/ZW J
	R553	QRL039J-390	OM R	39Ω 3W J	© N314	Λισο-Γοστν	C R	00W2 1/2W J

<u>∧</u> Symbol No.	Part No.	Part Name	Description	<u>∧</u> Symbol No.	Part No.	Part Name	Description
R915 R917 R918 R919 R924 R930 R939 R940 R941 R950 R951 R952 R953 R954 R973 R975 R977 R978 R979 R980 △ R998 R999 C001 C102 C104 C105 C106 C107 C113 C114 C116 C117 C118 C119 C120 C124 C131 C114 C165 C166 C207 C203 C211 C212 C221 C222 C233 C237 C241 C242 C243 C244 C285 C286 C287 C288 C302 C352 C354 C391 C392 C424 C425 C428 C427 C428 C431 C432 C433	QRK129J-688 QRK126J-332X QRE121J-222Y QRE121J-222Y QRE121J-222Y QRE121J-223Y QRE121J-223Y QRE121J-223Y QRE121J-181Y QRL029J-183 NRSA63J-070X NRSA63J-102X QRE121J-272Y QRE121J-272Y QRE121J-272Y QRE121J-272Y QRE121J-272Y QRE121J-272Y QRE121J-272Y QRE121J-272Y QRE121J-272Y QRE121J-273Y QRE121J-275 QRETMLHM-106 NCB31HK-103X NCB31HK-103X NCB31HK-103X NCB31HK-103X QRETMLHM-106 NDC31HJ-470X NDC31HJ-470X NDC31HJ-470X NDC31HJ-470X NDC31HJ-470X NDC31HJ-470X NDC31HJ-100X QRETMLHM-106 NDC31HJ-100X QRETMLHM-106 NDC31HJ-100X QRETMLHM-107 NCB31HK-103X NCB31HK-103X QRETMLHM-106 NDC31HJ-100X QRETMLHM-107 NCB31HK-103X QRETMLHM-106 QRETMLCM-107 NCB31HK-103X QRETMLHM-107 NCB31HK-103X QRETMLHM-106 QRETMLCM-107 NCB31HK-103X QRETMLHM-107 NCB31HK-103X QRETMLHM-106 QRETMLCM-107 NCB31HK-103X	CCCCCMFCMMGGRARRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRR	3.8 Ω 1/2W J 3.3 kΩ 1/2W J 2.2kΩ 1/2W J 1.8 Ω 2W J 0.0Ω 1/16W J 4.7 kΩ 1/16W J 1.8 Ω 1/2W J 2.2 kΩ 1/2W J 3.3 kΩ 1/16W J 4.7 kΩ 1/16W J 3.3 kΩ 1/16W J 1.2 Ω 2W J 1.2 Ω 3 W J 1.2 Ω 4 W J 1.2 Ω 4 W J 1.2 Ω 5 W M 1.2 Ω 6 W M 1.2 Ω 6 W M 1	C435 C440 C501 C502 C503 C504 C505 C507 C508 △ C510 △ C513 △ C514 △ C515 △ C515 △ C516 C521 C523 C526 C527 C533 C601 C602 C603 C604 C605 C607 C608 C609 C610 C611 C612 C613 C614 C615 C616 C622 C623 C624 C625 C626 C627 C628 C629 C636 C637 C652 C626 C627 C628 C627 C658 C700 C701 C702 C703 C704 C705 C706 C708 C707 C706 C708 C707 C711 C712 C716 C721 C726 C728 C857 C857 C857 C857 C857 C857 C857 C85	NCB21HK-183X QC52HJ-100 QCB32HK-151 QCB32HK-151 QCB32HK-151 QCB32HK-151 QCB32HK-151 QCB32HK-151 QCB32HK-105 QEZ0203-107 QENCAM-225 QEMGLHK-475 QEMGLHK-475 QF02196-582 QF20196-113 QF732GJ-183 QF732GJ-183 QF732GJ-183 QF732GJ-183 QF732H-106 QETNLEM-106 QETNLEM-107 QFV21HJ-824 QF102HJ-1037 QF71HJ-1047 QF71HJ-1057 NCB31HK-103X NC	CCCCCEEEECAP	0.018 µF 50V K 10pF 500V J 150pF 500V K 330pF 500V K 330pF 500V K 1 µF 160V M 10 µF 160V M 2.2 µF 100V M 4.7 µF 50V K 5800pF1.5 kVH±3% 0.011 µF1.9 kVH±3% 0.011 µF1.9 kVH±3% 0.011 µF1.9 kVH±3% 0.011 µF1.9 kVH±3% 0.01 µF 250V J 0.4 µF 250V J 0.4 µF 250V J 0.4 µF 250V J 0.0 µF 250V J 0.0 µF 250V M 47 µF 25V M 0.1 µF 25V K, 803S 0.1 µF 25V K, 803S 0.1 µF 25V M, 803S 0.1 µF 25V M 0.1 µF 16V Z 100 µF 50V K, 803S 0.1 µF 25V M 0.1 µF 50V M 100 µF 50V K 0.0 µF 50V M 100

<u>∧</u> Symbol	No. Part No.	Part Name	Description
▲ OR	0FZ9072-104 0FZ9072-473 0FZ9075-473 0FZ9075-473 0FZ9075-104 0FZ9075-104 0FZ9072-104 0CZ9054-102 0CZ9054-102 0CZ9054-102 0CZ9054-102 0CZ9054-102 0CZ9054-102 0CZ9054-102 0CZ9054-103 0CZ9072-103 0CZ0840-222 0FLCIHJ-471Z 0ETMIHN-107 NDC31HJ-3311X NCB31HK-104X 0FP32GJ-103 0CZ0840-102 0ETMICM-108 NDC31HJ-151X 0ETMICM-108 NDC31HJ-151X 0ETMICM-108 0CZ0840-102 0EHMIHN-105 0CZ0841-102 0EHMIHN-105 0CZ9072-103 0CZ9072-103 0CZ9072-103 0CZ9072-103 0CZ9072-103 0CZ9074-103 0CL244K-560Z 0QL244K-822 0QL244K-820Z 0QL244K-200Z 0QL244K-200Z 0QL244K-200Z 0QL244K-200Z	MF CAP. MFP CAP. MFP CAP. MPP CAP. MPP CAP. CCP. CCP. CCP. CCP. CCP. CCP. CCP.	0.1µFAC275V K 0.047µFAC275V K 0.047µFAC275V M 0.1µFAC275V M 0.1µFAC275V M 0.1µFAC275V K 1000pFAC250V Z 1000pFAC250V M 1000pFAC250V M 1000pFAC250V M 2200pF 2kV K 470pF 50V J 1800pF 50V K 0.1µF 50V M 0.01µF 50V M 1000pF 50V K 0.01µF 50V M 1000pF 2kV K 220µF 16V M 150pF 50V J 1000pF 2kV K 220µF 25V M 150pF 50V K 1000pF 2kV K 220µF 25V M 150pF 50V K 100pF 50V K 100pF 50V M 100pFAC25V M 10pF 5V M 10pF
▲ L511 L511 L511 L511 L701 L702 L703 L704 L705 L931 L933 L940 CF000 CF131 CF160 LC600 LC6	QQR1165-001 QQL2027-821 QQL2027-821 QQL2036-821 QQR1333-001 QQL244K-2202 QQL244K-2202 QQL244K-2202 QQL244K-2202 QQL244K-2202 QQL244K-2202 QQL244K-2001 QQR0582-0012 QAX0849-001 QAX0849-001 QR1199-001 QRX082-0012 QQR0582-0012	LINEARITY COIL COIL COIL COIL COIL COIL COIL COIL	22μΗ Κ 22μΗ Κ 22μΗ Κ 22μΗ Κ 24μΗ Κ 47μΗ Κ 47μΗ Κ

Δ	Symbol No.	Part No.	Part Name	Description
	T111 T501 T502 T921 T951 OR FC901 FC902 J601 J602 J810 LF902 VA901 CP936 CP936 F901 F905 CN000 CN000 CN000 CN000 CN000 CN000 CN000	QQR@907-001 CE42034-002 QQHQ121-001 QQSQ138-001 QQTQ355-001 CEMG002-001Z CEMG002-001Z QNNG849-002 QNNG849-002 QNSQ01-001 QQRG527-004 ERZV10V621CS ICP-N70-T QMF51U1-5RO-J8 QMF50249-5ROZ-E QGB1505J1-35 QGB1505J1-35 QGB2501C5-06Z QGA2501C5-06Z	IF.TRANSFORMER HOR DRIVE TRANS FB TRANSF SW TRANSF POWER TRANSF FUSE CLIP FUSE CLIP FIN JACK PIN JACK LINE FILTER LINE FILTER CIRCUIT PROTECTOR CIRCUIT PROTECTOR FUSE B TO B CONNE B TO B CONNE B TO B CONNE W TO B CONNE W TO B CONNE	5. 0A 5. 0A

CRT SOCKET P.W. BOARD ASS'Y

(SGJ-3002A-M2)

Δ	Symbol No.	Part No.	Part Name	Description
Δ	Q3108 Q3106 Q3107 Q3108 Q3107 Q3109 Q3109 Q3101 Q3300 Q3300 Q3300 Q3306 Q3306 Q3306 Q3306 Q3310 D3100 D3100 D3100 D3310 D3311 D331 D3311 D3311 D3311 D3311 D3311 D3311 D3311 D3311 D3311 D3311 D	2SA93AS/QR/-T 2SC1740S/QR/-T 2SA93AS/QR/-T 2SC348/DE/ 2SC5248/DE/ 2SC51740S/QR/-T 2SC1740S/QR/-T 2SC933AS/QR/-T 2SC9383/L-P/-T 2SC9383/L-P/-T 2SC5147/CDE/F43	MG R C R MG R F R MG R MG R MG R MG R MG R	0. CΩ 1/16W J .3 kΩ 1/16W J 10Ω 1/4W J 47Ω 1/16W J 14Ω 1/16W J 12Ω 1/16W J 12Ω 1/16W J 360 Ω JW J .2 kΩ 1/16W J 39Ω 1/16W J 39Ω 1/16W J 5. 6Ω 1/16W J 5. 6Ω 1/16W J

∆ Symbol No. Part No. Part Name	Description
A Symbol No. Part No. Part Name	Description

Δ	Symbol No.	Part No.	Part Name	Description
Δ	L3304 L3305 L3306 K3102 K3104 K3104 K3105 SK3001 CN3004 CN3005	QQL244K-470Z QQL244K-470Z QQL244K-470Z CE41492-001Z CE41492-001Z CE41492-001Z QMZ0464-001 QJB003-073226 WJA0029-001A	COIL COIL COIL COIL COIL COIL COIL COIL	47 ₁ Н К 47 ₁ Н К 47 ₁ Н К

PIP P.W. BOARD ASS'Y (SGJ-4001A-M2) [AV-27F803/S ONLY]

Δ	Symbol No.	Part No.	Part Name	Description
<u>A</u>	Symbol No. SF4101 TU4001 TU4001 TU4101 TU4101 TU4101 TU4101 TU4301 Q4301 Q4302 Q4333 Q4332 Q4333 Q4332 Q4333 R4000 R4000 R4000 R4000 R4100 R4111 R411	Part No. QAX0726-001 QAU0273-001 M523425P SDA9389X 25C9837L-P/-T 25R09A/QR/-X 25D01A/QR/-X 25D01A/QR/-X 25D01A/QR/-X 25D01A/QR/-X 25D01A/QR/-X 25B79A/QR/-X 25B7	SAW FILTER TUNER IC IC TRANSISTOR MG R MG	Description 10k0 1/16W J 10k0 1/16W J 10k0 1/16W J 1000 1/16W J 1000 1/16W J 0.00 1/16W J 5.6k0 1/16W J 5.6k0 1/16W J 1000 1/16W J 1000 1/16W J 27k0 1/16W J 27k0 1/16W J 20k0 1/16W J
_				

<u>∧</u> Symbol No.	Part No.	Part Name	Description
R4331 R4332 R4337 R4338 R4349 R4344 C4008 C4008 C4004 C4006 C4100 C4300	NRS.A63.J-221X NRS.A63.J-102X NRS.A63.J-102X NRS.A63.J-221X NRS.A63.J-221X NRS.A63.J-102X QETMI.HM-476 QETMI.EM-476 NCB3.HK-103X NCB3.H	MG R	220Ω 1/16W J 1kΩ 1/16W J 220Ω 1/16W J 1kΩ 1/16W J 10µF 50V M 10µF 50V M 0.01µF 50V K 0.01µF 50V M 0.01µF 50V K

AV SEL P.W. BOARD ASS'Y (SGJ-5001A-M2) [AV-27F803/S]

A	Symbol No.		GJ-5001 A-M2) Part Name	[AV-27F803/s]
	Symbol No. ICS001 ICS1511 ICS501 ICS500 ICS	Part No. CXA2134Q NJM2150AD PQ36013 TA1218AN 25B709A/QR/-X 25B709A/QR/-X DTC323TK DTC323TK DTC323TK DTC323TK DTC323TK CAMTZJ9.1C MTZJ9.1C	PART Name IC IC IC IC IC IC TRANSISTOR DIGI TRANSISTOR DIGI TRANSISTOR DIGI TRANSISTOR DIGI TRANSISTOR TRANSI	Description 1MΩ 1/16W J 100MΩ 1/16W J 6.8MΩ 1/16W J 6.8MΩ 1/16W J 6.8MΩ 1/16W J 3.MΩ 1/16W J 2.MΩ 1/16W J
	R5516 R5517 R5519 R5520 R5521	NRSA63J-103X NRSA63J-103X NRSA63J-750X NRSA63J-750X NRSA63J-750X	MG R MG R MG R MG R MG R	10kΩ 1/16W J 10kΩ 1/16W J 75Ω 1/16W J 75Ω 1/16W J 75Ω 1/16W J

Δ	Symbol No.	Part No.	Part Name	Description
	R5524 R5536 R5547 R5532 R5537 R5532 R5538 R5544 R5544 R5544 R5546 R5556 R5566 R5566 R5566 R5566 R5566 R5566 R5566 R5566 R5566 R5567 R5588 R5500 C5000	NRSA63J-103X NRSA63J-103X NRSA63J-224X NRSA63J-221X NRSA63J-221X NRSA63J-221X NRSA63J-221X NRSA63J-221X NRSA63J-331X NRSA63J-331X NRSA63J-30ROX NRSA63J-0ROX NRSA	MG R	10kΩ 1/16W J 10kΩ 1/16W J 220kΩ 1/16W J 220kΩ 1/16W J 220kΩ 1/16W J 220Ω 1/16W J 220Ω 1/16W J 220Ω 1/16W J 330Ω 1/16W J 330Ω 1/16W J 0.0Ω 1/16W J 0.Ω 1/

Δ	Symbol No.	Part No.	Part Name	Description
	J5504 CN5MD1 CN5MD1 CN5M3 CN5M6	QNN0848-001 QGC2505C2-38 QGB1505K1-35 QGB1505K1-15 QGA2501C5-05Z	PIN JACK CARD EDGE COME,803S B TO B CONNE B TO B CONNE W TO B CONNE	

AV SEL P.W. BOARD ASS'Y (SGJ-5002A-M2) [AV-27F703/S] [AV-27F713/S]

RSS	<u>∧</u> Symbol No.	Part No.	Part Name	Description	<u>∧</u> Symbol No.	Part No.	Part Name	Description
C5015 QBTCICK-106Z TAN.CAP. 10µF 16V K CN5001 QGB1505K1-35 B TO B CONNE CN5006 QGA2501C5-05Z W TO B CONNE	R5240 R5241 R5242 R5243 R5253 R5253 R5254 R5254 R5256 R5260 R5270 R5384 R5386 R5386 R5386 R5386 R5386 R5386 R5386 R5386 R5386 R5386 R5386 R5386 R5386 R5386 R5386 R5386 R5386 R5386 R5386 R5387 R5386	NRS/63J-0R0X NRS/63J-101X NRS/63J-101X NRS/63J-101X NRS/63J-101X NRS/63J-102X NRS/63J-102X NRS/63J-102X NRS/63J-102X NRS/63J-102X NRS/63J-101X NRS/6	RRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRR	0.00 1/16W J 8200 1/16W J 1000 1/16W J 1000 1/16W J 1000 1/16W J 1kQ 1/16W J 1kQ 1/16W J 1kQ 1/16W J 1000 1/16W J 1000 1/16W J 2.2kQ 1/16W J 2.20Q 1/16W J	C5016 C5017 C5018 C5017 C5018 C5017 C5018 C5020 C5020 C5021 C5022 C5023 C5024 C5025 C5031 C5151 C5152 C5153 C5153 C5154 C5153 C5156 C5206 C5206 C5206 C5206 C5201 C5211 C5212 C5213 C5214 C5213 C5214 C5215 C5228 C5228 C5228 C5228 C5228 C5238 C5250 C5251 C5251 C5251 C5251 C5251 C5251 C5252 C5252 C5253 C5253 C5253 C5250 C5500	QETNLHM-105 QENCLHM-105 QENCLHM-105 QENCLHM-105 QENCLHM-105 NCB31HK-272X QENCLHM-475 NCB31EK-104X QBSTLHM-475 NCB31EK-104X QBTCLHM-475 NCB31EK-104X QBTCLHM-105 QENCLHM-105 QENCLHM-105 QENCLHM-105 QENCLHM-106 QENCLHM-106 QENCLHM-106 QENCLHM-106 QETNLHM-106 QETNLHM-106 QETNLHM-106 NCB31HK-333X NCB31EK-333X NCB31EK-333X NCB31EK-333X NCB31EK-333X NCB31EK-103X QETNLEM-476 NCB31HK-103X QETNLEM-476 NCB31HK-103X QETNLEM-476 NCB31HK-103X QETNLEM-476 NCB31HK-103X QETNLEM-476 NCB31HK-103X QETNLEM-107 NCB31HK-103X NCB31HK-103X QETNLEM-107 NCB31HK-103X NCB31HK-103X NCB31HK-103X NCB31HK-103X NCB31HK-103X NCB31HK-103X NCB31HK-103X NCB31HK-103X NCB31HK-103X QETNLEM-476 NCB31HK-103X NCB31HK-103X QETNLEM-476 NCB31HK-103X	E CAP. CAP.	1µF 50V M 1µF 50V M 1µF 50V M 0.02µF 50V K 4700pF 50V K 4700pF 50V K 4.7µF 50V M 0.1µF 25V K 4700pF 50V K 4.7µF 50V M 0.1µF 25V K 3.3µF 16V K 10µF 50V M 1µF 50V M 10µF 50V K 0.033µF 25V K 0.033µF 25V K 0.033µF 25V K 0.031µF 50V M 10µF 50V M 10µF 50V M 10µF 50V M 0.1µF 50V M 0.1µF 50V M 0.01µF 50V K 0.01µF 50V K 10µF 16V M 0.01µF 50V K 10µF 16V M 0.01µF 50V K

FRONT CONTROL P.W. BOARD ASS'Y (SGJ-6001A-M2)

Δ	Symbol No.	Part No.	Part Name	Description
	R6401 R6402 R6403 R6703 R6704 R6705 R6706 C6401 C6403 C6403 S6702 S6704 S6706 C6402 C6403 C6403 C6403 C6403 C6403 C6403 C6403 C6403 C7605 C7606 C76007	NRSA63J-750X NRSA63J-224X NRSA63J-224X NRSA63J-102X NRSA63J-102X NRSA63J-152X NRSA63J-152X NRSA63J-252X QETNIHM-106 QETNIHM-225 QETNIHM-225 QETNIHM-225 QETNIHM-225 QETNIHM-203 QSW0619-003Z QSW0619-	MG R	75Ω 1/16W J 220KΩ 1/16W J 220KΩ 1/16W J 1KΩ 1/16W J 1.5KΩ 1/16W J 2.7KΩ 1/16W J 5.6KΩ 1/16W J 2.7kΩ 1/16W J 2.2μF 50V M 2.2μF 50V M 2.2μF 50V M CH- CH- VOL-

LED & POWER SW P.W. BOARD ASS'Y (SGJ-7001A-M2)

<u> </u>	Part No.	Part Name	Description
IC7701 Q7702 D7701 R7708 R7709 R7710 R7711 C7701 S7701	LC30190-001B-A GP11M281QK UN2112 LH22440 NR5A63J-152X NR5A63J-561X NR5A63J-101X NR5A63J-101X QETNLEM-476 QSW0847-001	LED HOLDER IR DETECT UNIT DIGIT TRANSISTOR LE DIODE MG R TACT SWITCH	1.5kΩ 1/16W J 56QΩ 1/16W J 10ΩΩ 1/16W J 10ΩΩ 1/16W J 47μF 25V M POWER SW

3D Y/C SEP MODULE P.W. BOARD ASS'Y (SGJ0Y001A-M2) [AV-27F803/S ONLY]

Δ	Symbol No.	Part No.	Part Name	Description
		SGJ0Y001A-M2	3D Y/C SEP MODULE P	

REMOTE COTROL UNIT PARTS LIST

Γ /	W-27F703/s1	(RM-C326G-1A)
1 <i>F</i>	1 W-2/F/U3/5 I	(RIVI-C326G-TA)

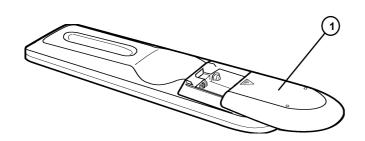
<u>∧</u> Ref.No.	Part No.	Part Name	Description
1	U R5 2E C 12 86 C	BATTERY COVER	

[AV-27F713/S] (RM-C326-1A)

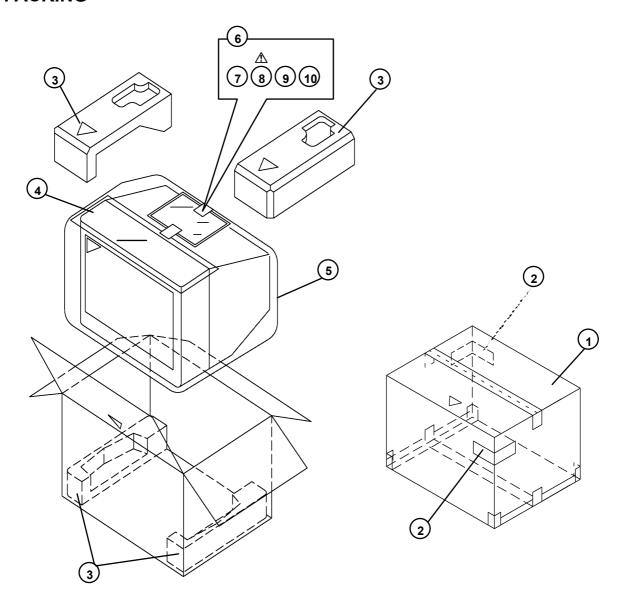
<u>∧</u> Ref.No.	Part No.	Part Name	Description
1	UR5 2E C 12 86 A	BATTERY COVER	

[AV-27F803/S] (RM-C325G-1A)

⚠ Ref.No.	Part No.	Part Name	Description
1	U R5 2E C 12 86 C	BATTERY COVER	_



PACKING



[AV-27F703/S][AV-27F713/S][AV-27F803/S]

PACKING PARTS LIST

⚠ Ref.No.	Part No.	Part Name	Description
1 2 3 4 5 6 7 7 7 7	L C1 01 8 1 - 02 5 B - A C M3 66 1 6 - 00 1 - A L C1 08 84 - 00 2 A - A C P3 00 5 5 - 00 1 - A C P3 00 5 6 - 00 8 - A Q PA 02 5 0 3 5 0 5 RM - C3 26 G - 1 A RM - C3 26 G - 1 A L CT 11 3 4 - 00 1 A - A B T - 5 10 28 - 2 0	PACKING CASE CORNERLABEL CUSHION ASSY TOP COVER POLY BAG POLY BAG REMOCON UNIT	2pcs in 1set 4pcs in 1set [AV-27F703/S] [AV-27F713/S] [AV-27F803/S]
10	BT-52006-1Q	WARRANTY CARD	

JVC SERVICE & ENGINEERING COMPANY OF AMERICA

DIVISION OF JVC AMERICAS CORP.

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		` '
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West Coast:	5665 Corporate Avenue, Cypress, California 90630	(714)229-8011
Southwest:	10700 Hammerly, Suite 105, Houston, Texas 77043	(713)935-9331
Hawaii :	2969 Mapunapuna Place, Honolulu, Hawaii 96819	(808)833-5828
Southeast :	1500 Lakes Parkway, Lawrenceville, Georgia 30243	(770)339-2582

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Head office: 21 Finchdene Square Scarborough, Ontario M1X 1A7 (416)293-1311 **Vancouver**: 13040 Worster Court Richmond B.C. V6V 2B3 (604)270-1311





JVC

SCHEMATIC DIAGRAMS

COLOR TELEVISION

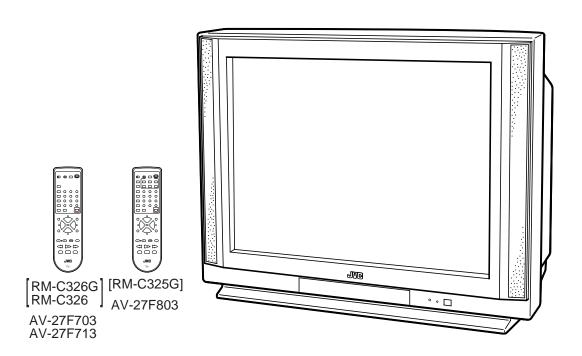
AV-27F703/s AV-27F713/s AV-27F803/s

BASIC CHASSIS

GJ



CD-ROM No.SML200207



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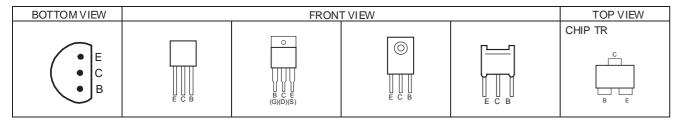
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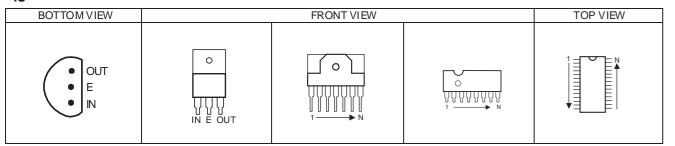
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SEMICONDUCTOR SHAPES

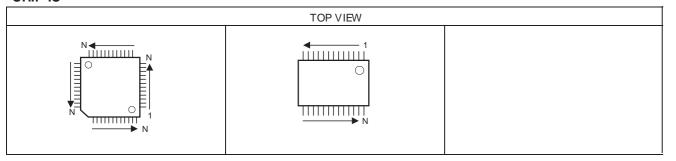
TRANSISTOR



IC:



CHIP IC



AV-27F703/s,AV-27F713/s,AV-27F803/s STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the \(\triangle \) symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal : Colour bar signal

(2) Setting positions of each knob/button and

variable resistor : Original setting position when shipped

:V

(3)Internal resistance of tester :DC 20kΩ/V

(4)Oscilloscope sweeping time $:H \rightarrow 20\mu S/div$

:Others ⇒ Sweeping time is specified

 \Rightarrow 5mS/div

(5) Voltage values :All DC voltage values

* Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

In the PW board :R1209 → R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM (1)Resistors

Resistance value

Rated allowable power

No indication :1/ 16 [W]
Others :As specified

Type

No indication :Carbon resistor

OMR :Oxide metal film resistor

MFR :Metal film resistor

MPR :Metal plate resistor

UNFR :Uninflammable resistor

FR :Fusible resistor

* Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

Capacitance value

1 or higher :[pF] less than 1 :[μF]

• Withstand voltage

vviii staria voitage

No indication :DC50[V]

Others :DC withstand voltage [V]
AC indicated :AC withstand voltage [V]

* Electrolytic Capacitors

47/50[Example]:Capacitance value [µF]/withstand voltage[V]

● Type
No indication

MM
:Metalized mylar capacitor

PP
:Polypropylene capacitor

MPP
:Metalized polypropylene capacitor

MF
:Metalized film capacitor

BP :Bipolar electrolytic capacitor
TAN :Tantalum capacitor

(3)Coils

TF

No unit :[µH]
Others :As specified

(4)Power Supply



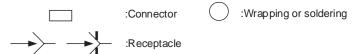
:Thin film capacitor

*Respective voltage values are indicated

(5)Test point



(6)Connecting method



(7)Ground symbol

J, :ISOLATED(NEUTRAL) side ground

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE: (\bot) side GND and the ISOLATED(NEUTRAL): (\bot) side GND. Therefore, care must be taken for the following points.

- (1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.
- (2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time.
 If the above precaution is not respected, a fuse or any parts will be broken.
- Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

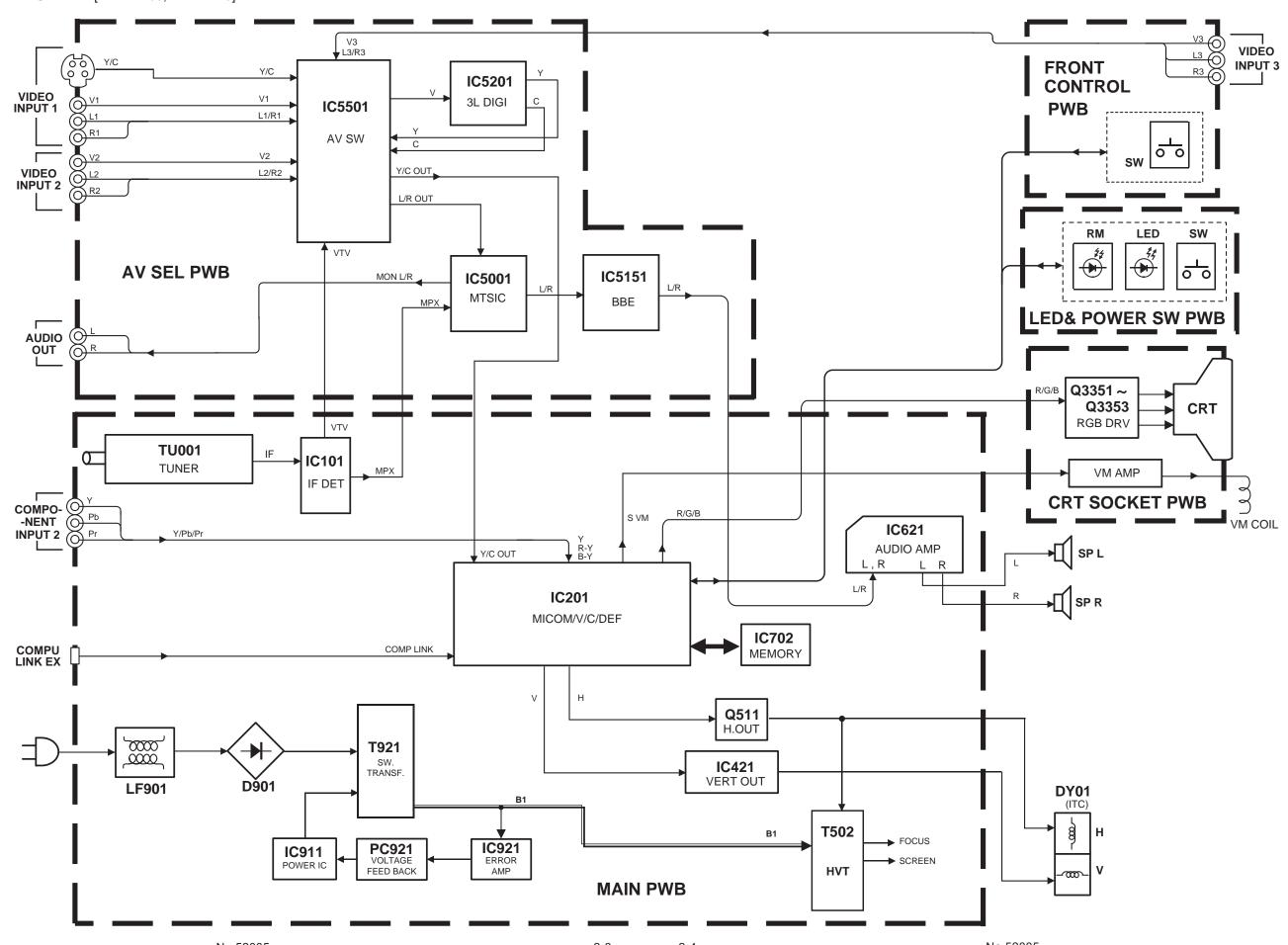
NOTE

Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.

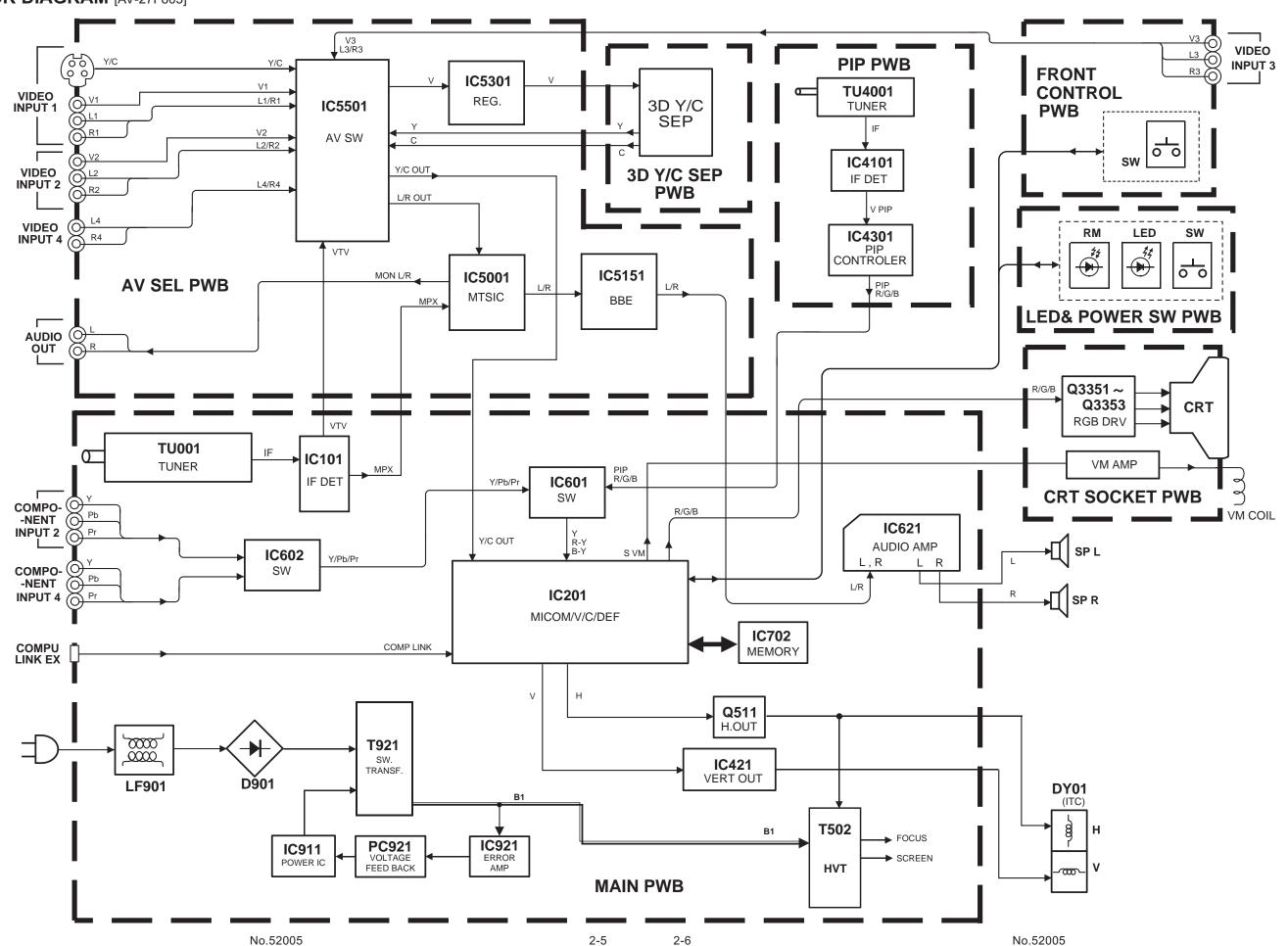
When ordering parts, please use the numbers that appear in the Parts List.

Jun. 2002 No. 52005

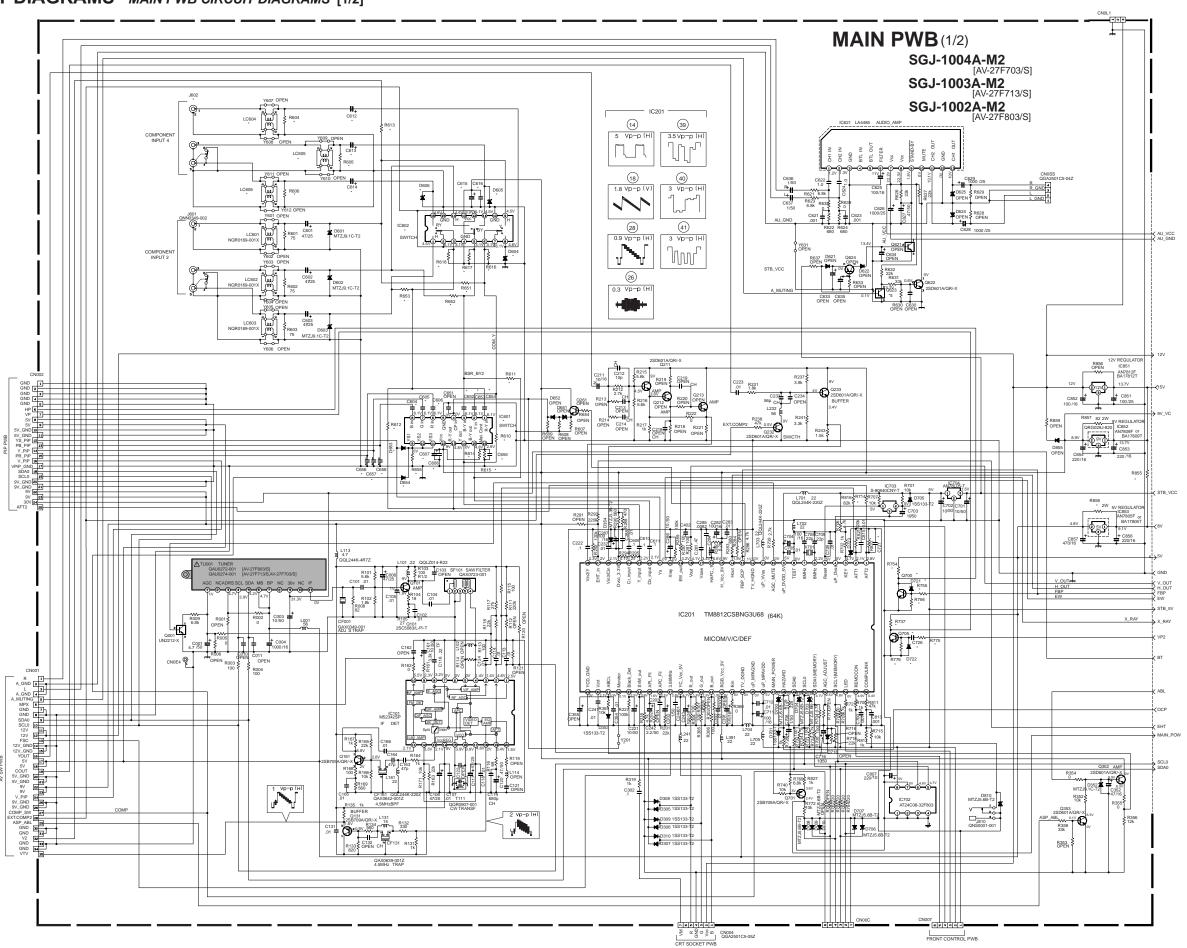
BLOCK DIAGRAM [AV-27F703,AV-27F713]

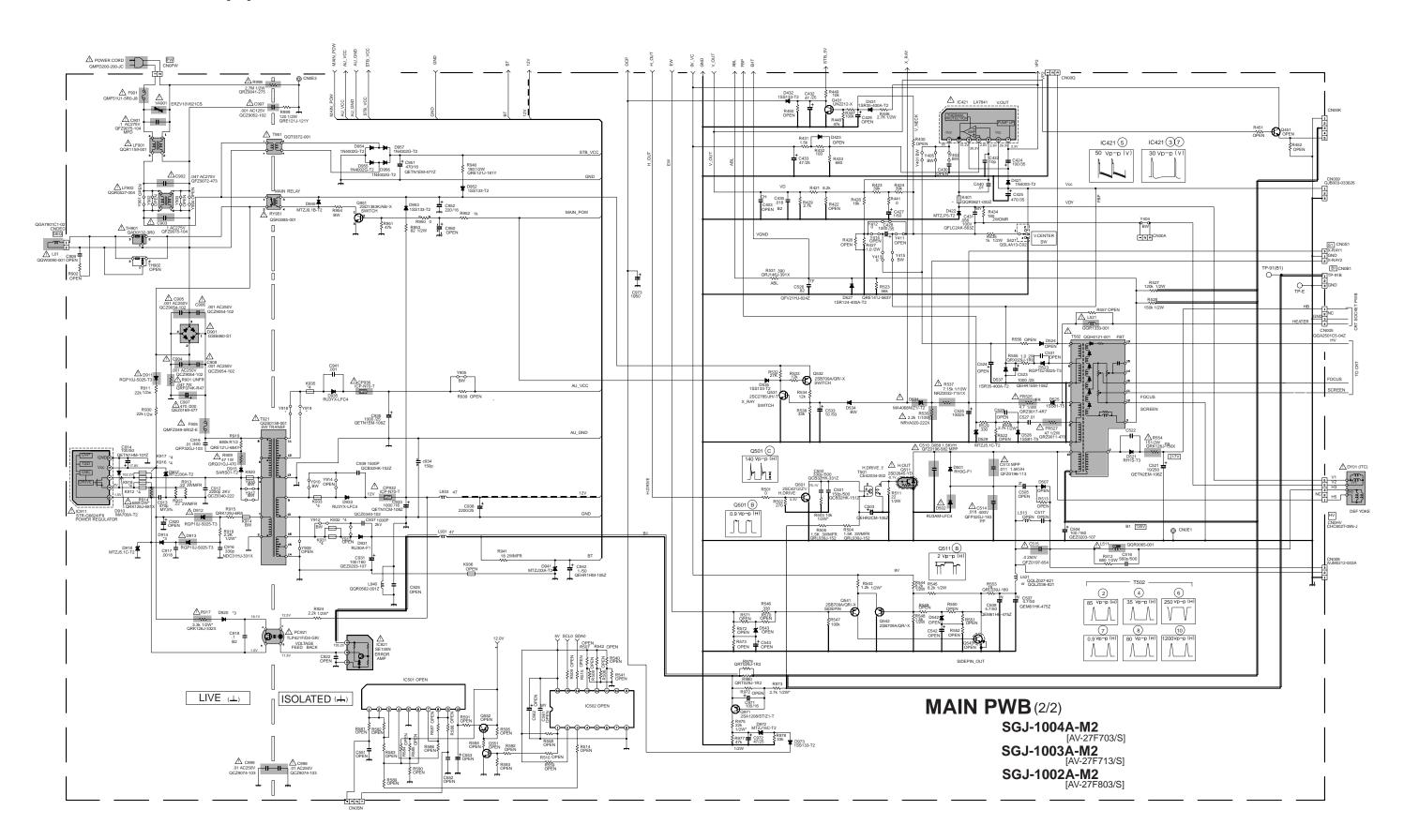


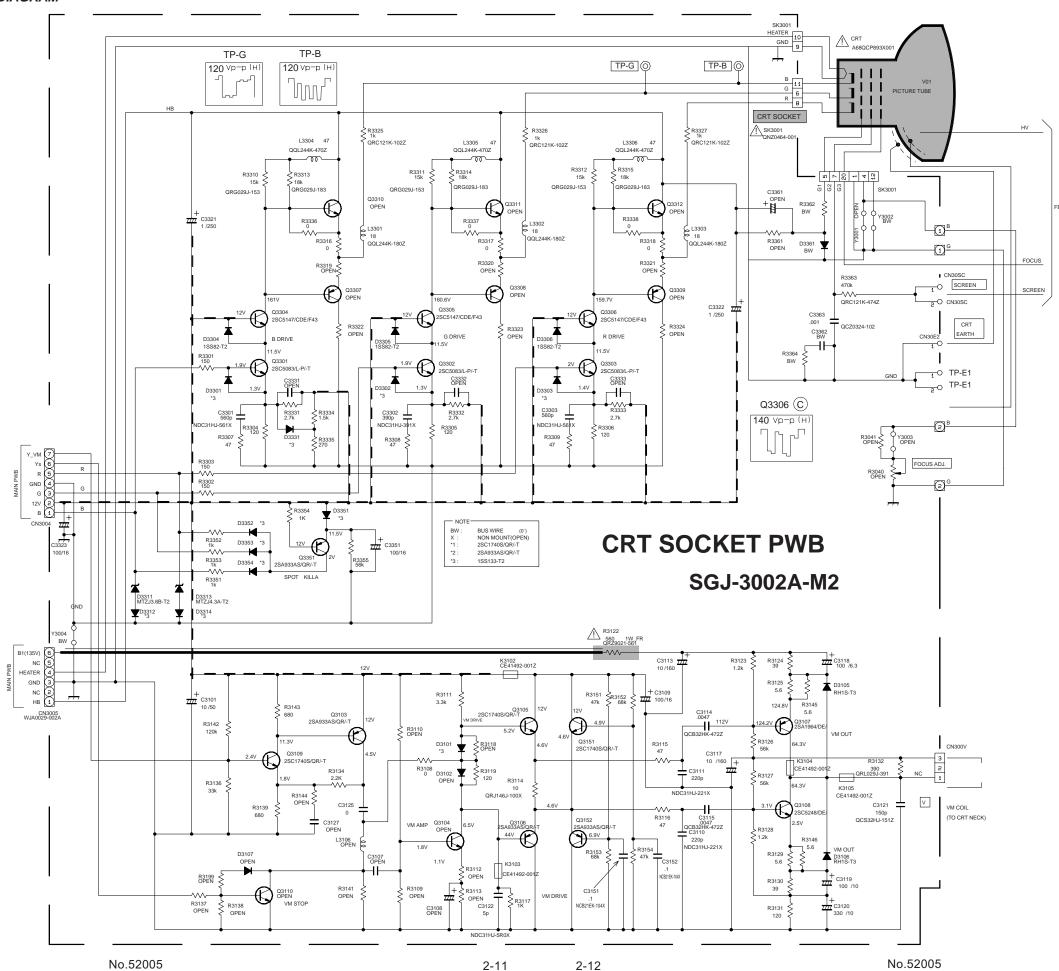
BLOCK DIAGRAM [AV-27F803]



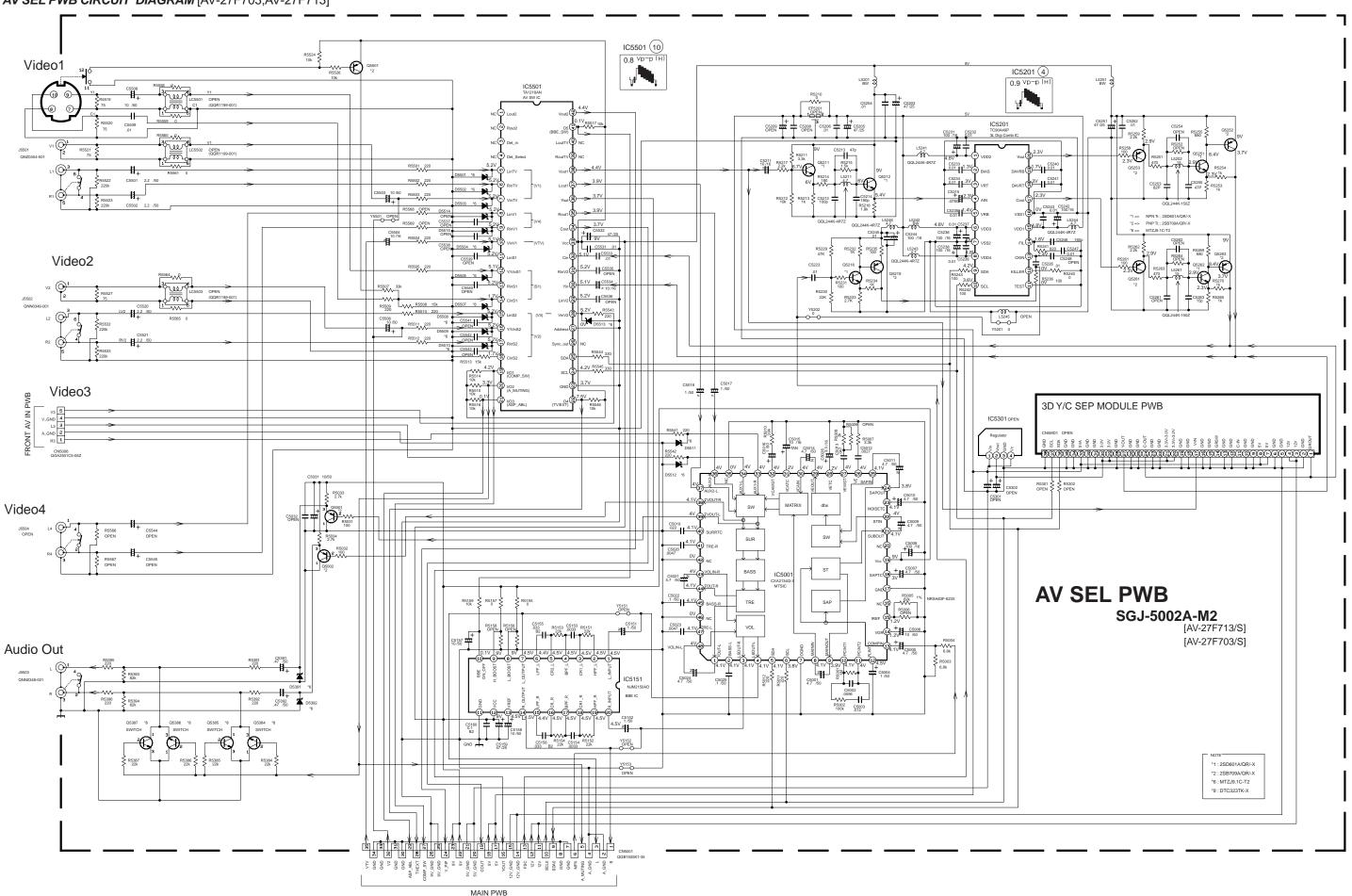
CIRCUIT DIAGRAMS MAIN PWB CIRCUIT DIAGRAMS [1/2]

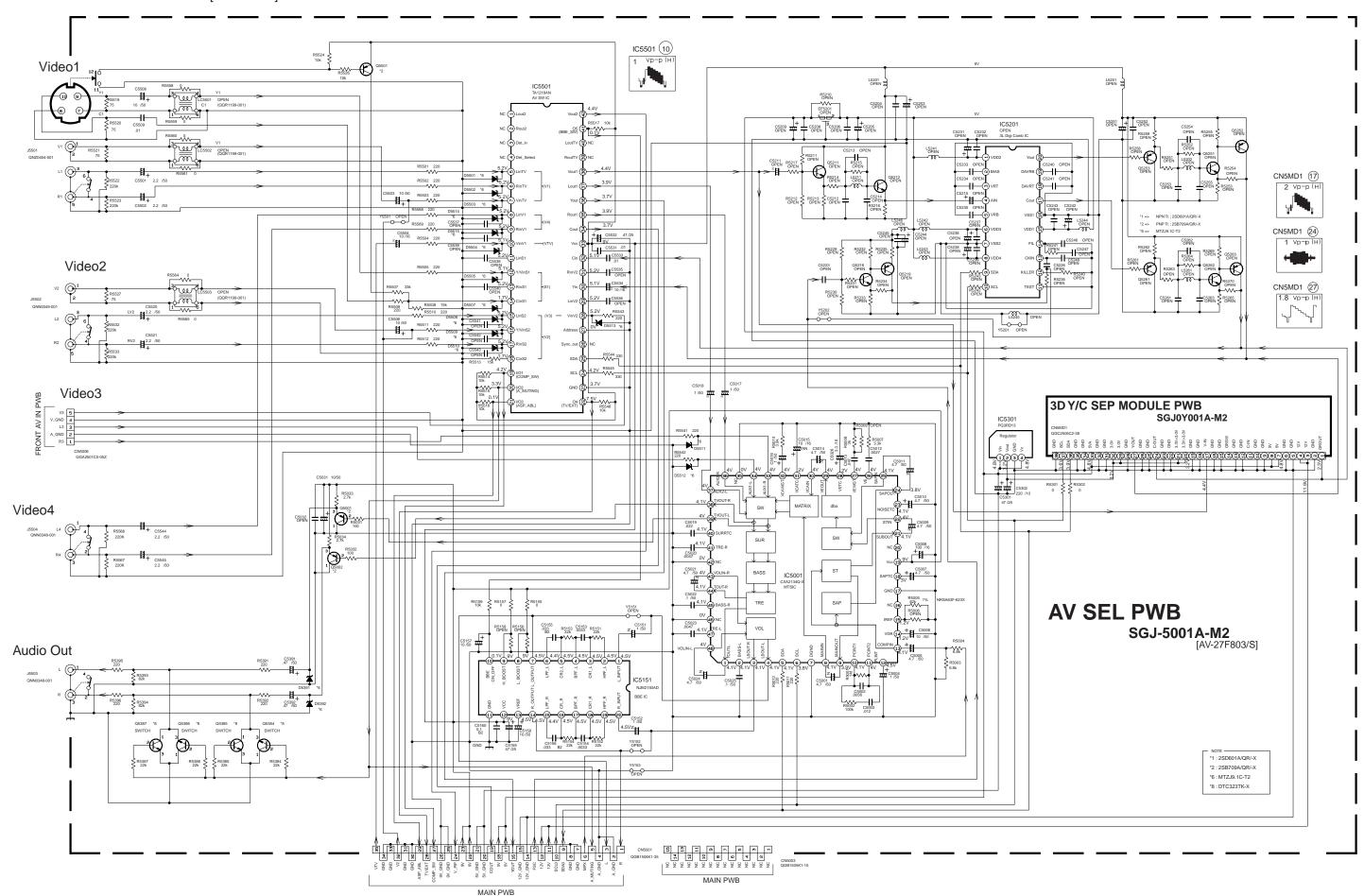


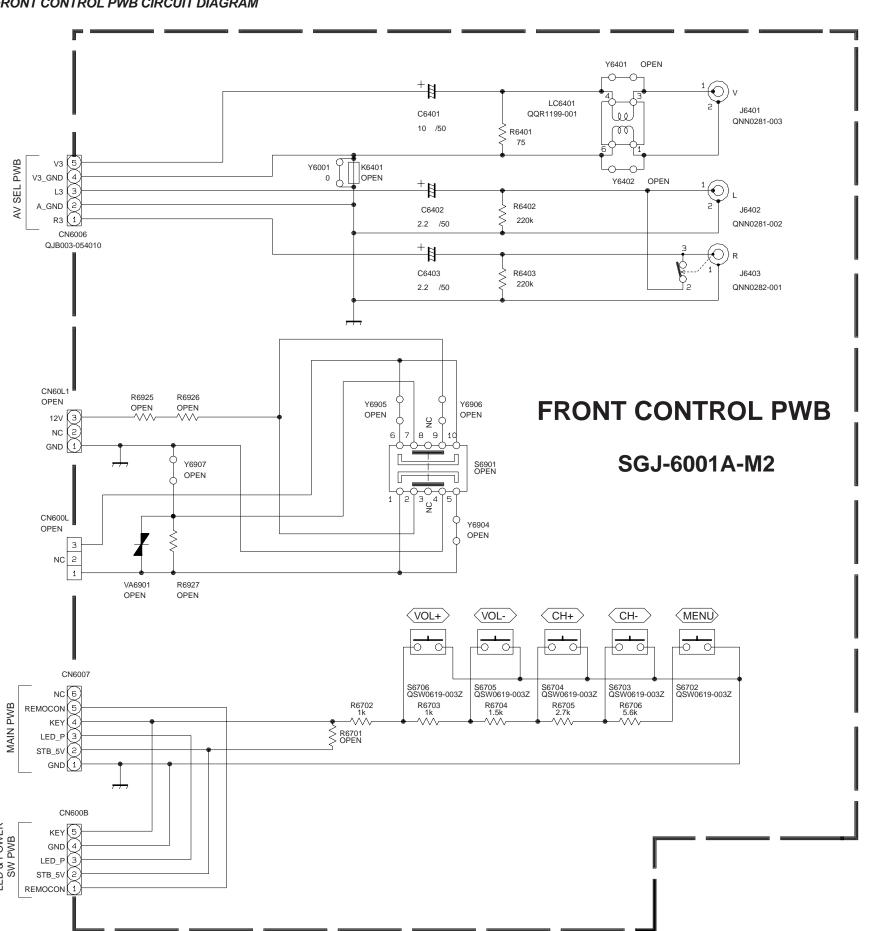




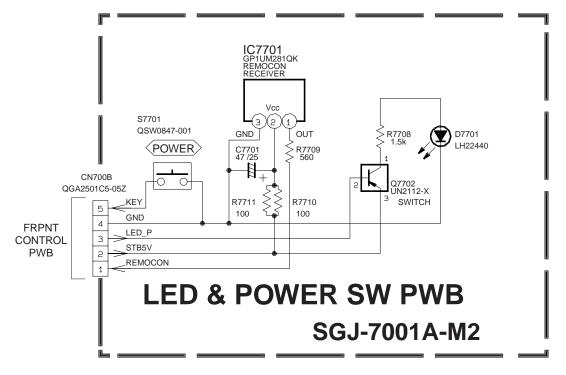
AV SEL PWB CIRCUIT DIAGRAM [AV-27F703,AV-27F713]

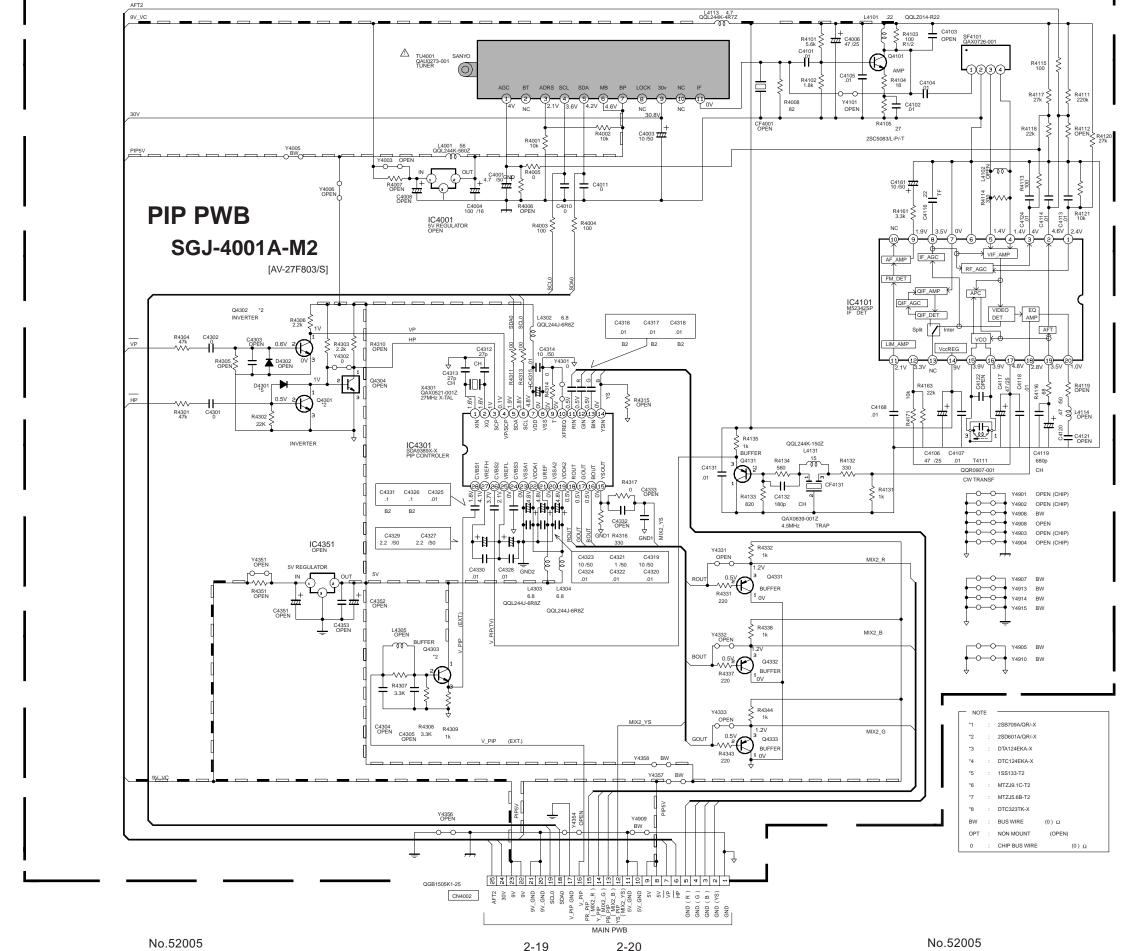




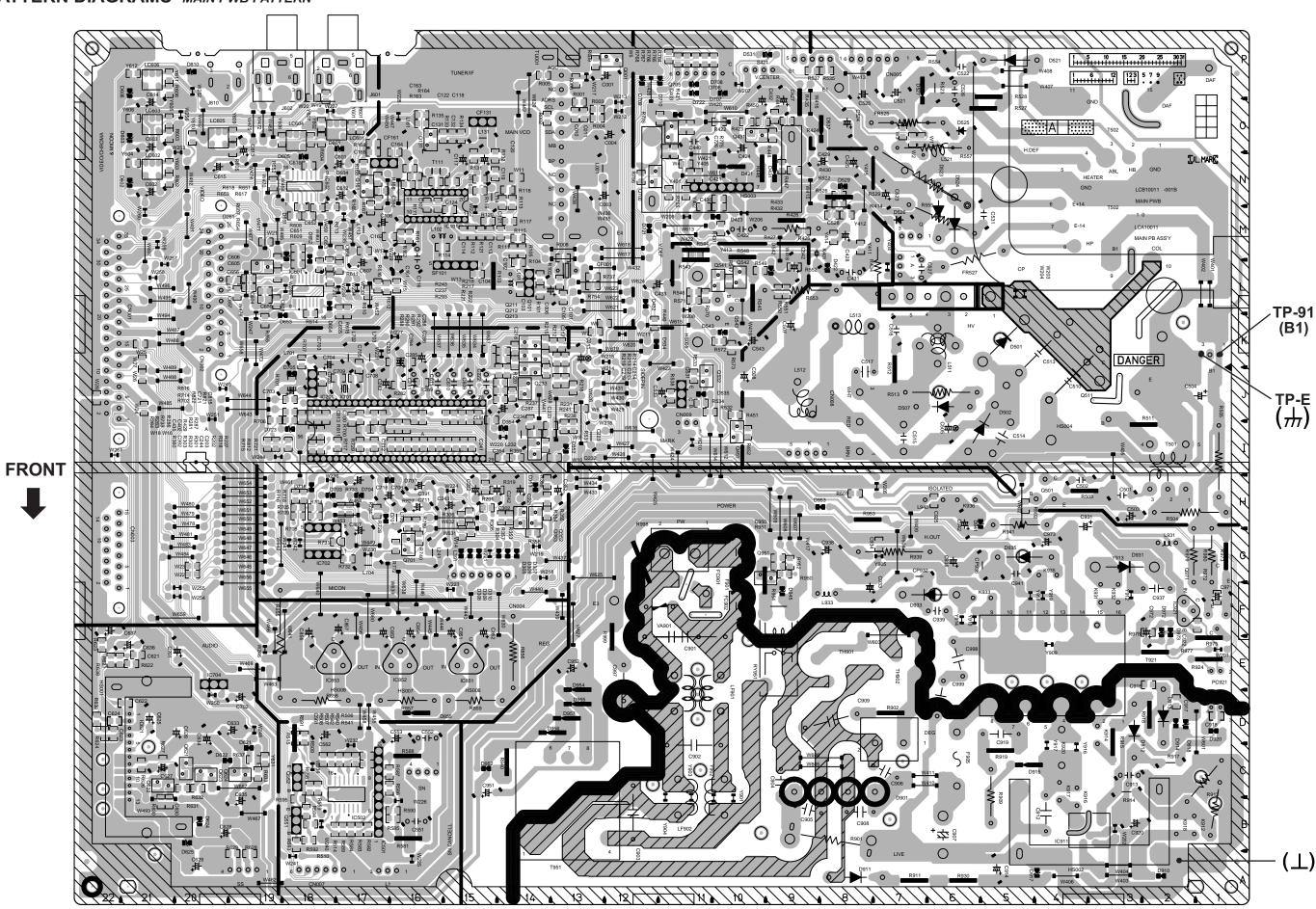


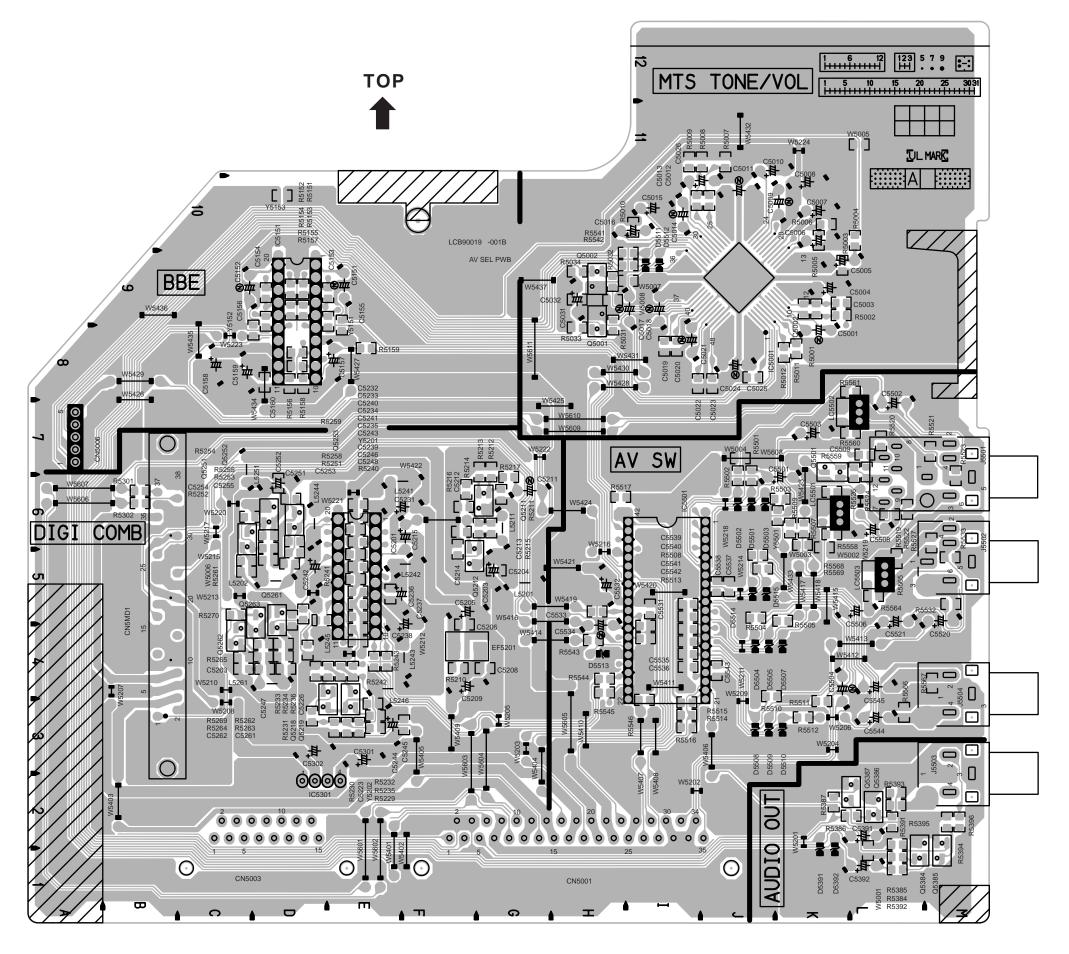
LED & POWER SW PWB CIRCUIT DIAGRAM

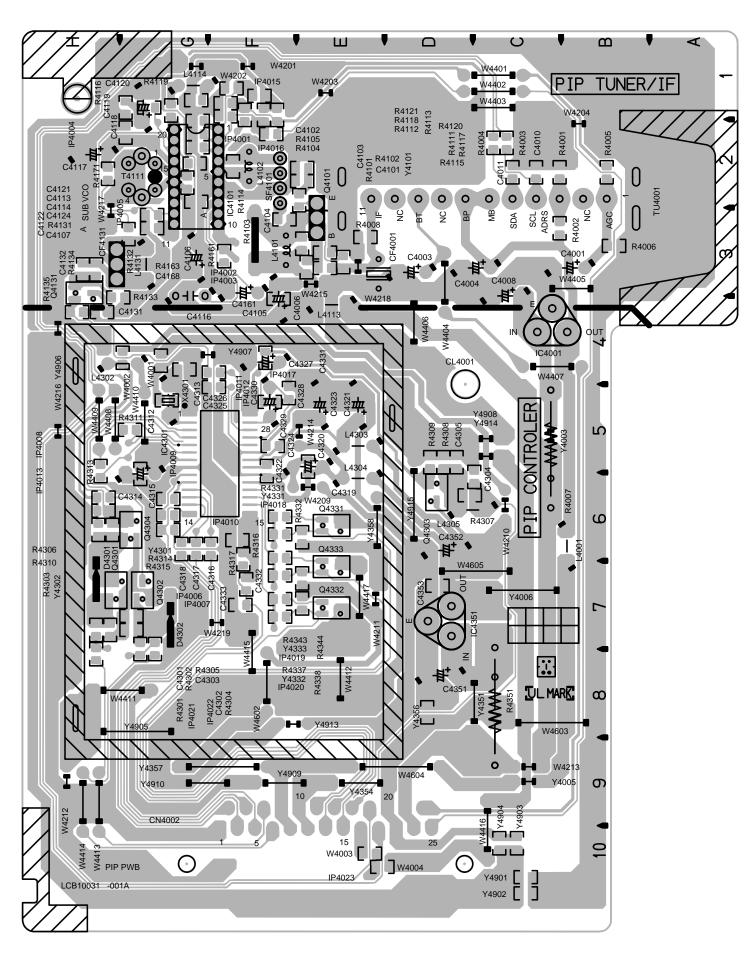




PATTERN DIAGRAMS MAIN PWB PATTERN

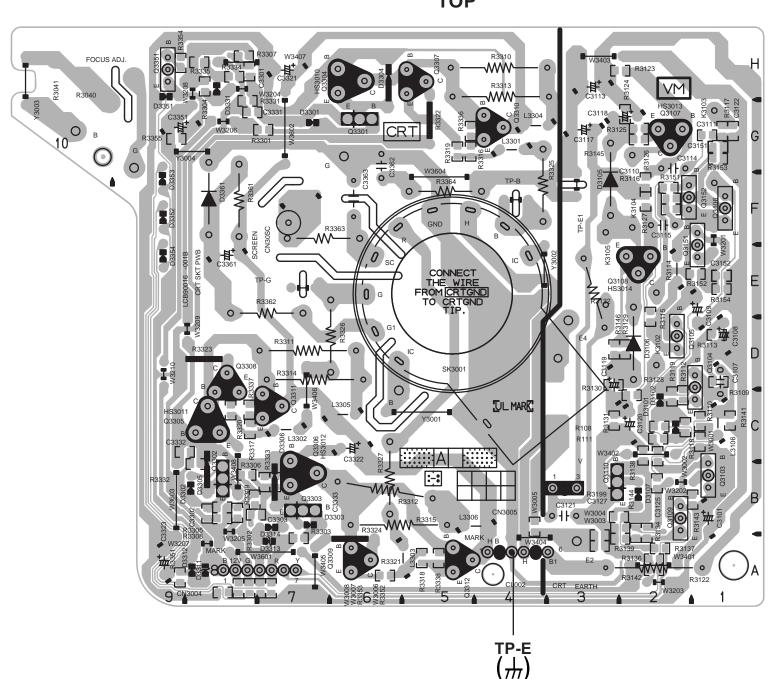


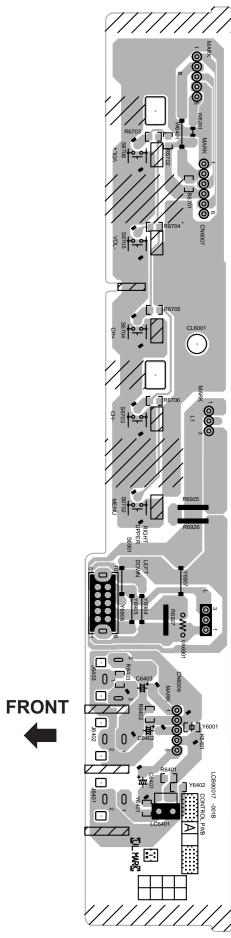




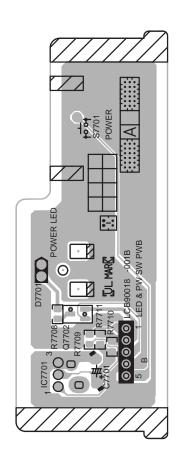
TOP

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FRONT CONTROL PWB PATTERN



CHANNEL CHART (US)

<u>CHAN</u>		СПАГ			1
	DE	BAND		NEL	TUNER
TV	CATV	571115	REAL	DISP.	BAND
		VL	0 0 0 0	3 4 5	I
0	0	VH	0 0 0 1 1	7 8 9 0 1 2	п
			A B	14 15	I
		MID	C D E F G H –	16 17 18 19 20 21 22	
		SUPER	J K L M Z O P Q R S T U > S	23 24 25 26 27 28 29 30 31 32 33 34 35 36	п
×	0		W+1 W+2 W+3 W+4 W+5 W+6 W+7 W+8 W+9 W+10 W+11	37 38 39 40 41 42 43 44 45 46 47	
		HYPER	W+12 W+13 W+14 W+15 W+16 W+17 W+19 W+20 W+21 W+22 W+23 W+24 W+25 W+26 W+27 W+28	48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64	IV
		ULTRA	W+29 W+30 W+31 W+32 W+33 W+34	65 66 67 68 69 70	

MODE			CHAI	TUNER	
TV	CATV	BAND	REAL DISP.		BAND
×	O	ULTRA	## REAL W+35	71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125	IV
		SUB MID	A-8 A-4 A-3 A-2 A-1	01 96 97 98 99	I
0	×	UHF	14 \$ IV 69		
TOTAL 180CH { VHF 124CH { UHF 56CH					
NOTE: TO RECEIVE THE SUBSCRIPTION OR PREMIUM PROGRAMMING FROM CERTAIN CABLE COMPANIES. SPECIAL ADAPTERS MAY BE REQUIRED.					

CHANNEL CHART (CA)

	CHANNEL CHART (CA)					
	DE	HAND -	CHANNEL		RANII)	TUNER
TV	CATV	BAILD	REAL	DISP.	BAND	
0	0	VL	0 0 0	2 3 4 5 6	I	
		VH	0 0 1 1 1	8 9 0 1 2 3		
		MID	< в < D ш 	14 15 16 17 18 19 20 21 22	П	
			J K L M N O	23 24 25 26 27 28		
		SUPER	PQRSTUVS	29 30 31 32 33 34 35 36		
×	0	HYPER	W+1 W+2 W+3 W+4 W+5 W+6 W+7 W+8 W+9 W+10 W+11 W+12 W+13 W+14 W+15 W+16 W+17 W+18 W+19 W+20 W+21 W+22 W+23 W+24 W+25 W+26 W+27 W+28	37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64	Ш	
		ULTRA	W+29 W+30 W+31 W+32 W+33 W+34	65 66 67 68 69 70	IV	

MODE		BAND	CHANNEL		TUNER
TV CATV		DAND	REAL	DISP.	BAND
×	O	ULTRA	REAL W+35 W+36 W+37 W+38 W+39 W+40 W+41 W+42 W+43 W+46 W+47 W+48 W+49 W+50 W+51 W+52 W+53 W+54 W+55 W+56 W+57 W+63 W+64 W+65 W+66 W+67 W+68 W+69 W+70 W+71 W+72 W+73 W+74 W+75 W+76 W+77 W+78 W+79 W+80 W+81 W+82 W+83 W+84	71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125	IV
		SUB	A-8 A-4	01 96	I
		MID	A-3 A-2 A-1	97 98 99	П
0	×	UHF	1	IV	
TOTAL 180CH { VHF 124CH { UHF 56CH					
NOTE: TO RECEIVE THE SUBSCRIPTION OR PREMIUM PROGRAMMING FROM CERTAIN CABLE COMPANIES. SPECIAL ADAPTERS MAY BE REQUIRED.					

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JVC SERVICE & ENGINEERING COMPANY OF AMERICA

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